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# A Study of the Use of Leisure by College Women

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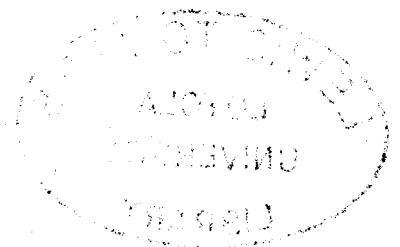
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A STUDY OF THE USE OF LEISURE  
BY COLLEGE WOMEN

by  
Joyce Eileen Gallagher

A Dissertation Submitted to the Faculty  
of the Graduate School of Loyola University of Chicago  
in Partial Fulfillment of the Requirements for the Degree of  
Doctor of Philosophy

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1975



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## VITA

Joyce Eileen Gallagher, daughter of Lawrence James and Frances Wilson Gallagher, was born September 3, 1937 in Ironton, Ohio.

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## CHAPTER I

### INTRODUCTION

Americans "hold these truths to be self evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness."<sup>1</sup> Through the years, these rights have been preserved, sometimes at the cost of life itself. However, when asked to give meaning to the term 'pursuit of Happiness' one finds adequate expression difficult. To the Founding Fathers, the pursuit of happiness meant "to be free of necessity and therefore, free to do whatever one wants to for itself alone."<sup>2</sup> This concept of the Founding Fathers and the classical definition of leisure used in this study are congruous.

The Occidental concept of 'leisure' traces its roots to the period of the ancient Greek philosophers who took the question of leisure seriously. Aristotle used the word scholē (σχολή) as 'leisure'. Etymologically, scholē meant "to halt or cease, hence to have quiet or peace."<sup>3</sup> From

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<sup>1</sup>"Declaration of Independence" quoted in Documents of American History, 7th ed., edited by Henry Steele Commager (New York: Appleton-Century-Crofts, 1963), p. 100.

<sup>2</sup>Sebastian de Grazia, Of Time, Work, and Leisure (New York: Twentieth Century Fund, 1962), p. 279.

<sup>3</sup>Ibid., p. 12.

this concept of scholē comes the definition of leisure as a condition or a state of being free from the necessity to labor.<sup>4</sup> The present study which examines the use of leisure by college women used the classical definition of leisure making more explicit the type of activity considered a leisure activity. Thus, 'leisure' is an "attitude of the mind,"<sup>5</sup> "a state of being in which activity is performed for its own sake or as its own end."<sup>6</sup> The college women who participated in this study selected the activities which they considered leisure activities for themselves, i.e., those which were performed for their own sake, thus concretizing the definition.

Studies of leisure become more important when viewed in the light of the influence of leisure on culture. "Culture depends for its very existence on leisure."<sup>7</sup> The vague but ominous notion has been voiced "that there is more than a tenuous connection between how a people use or abuse their leisure and the decline or survival of their civilization."<sup>8</sup> "A citizenry unprepared for leisure will

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<sup>4</sup>Ibid., p. 14.

<sup>5</sup>Josef Pieper, Leisure: The Basis of Culture (New York: Pantheon Books, 1963), p. 40.

<sup>6</sup>de Grazia, Of Time, Work, and Leisure, p. 15.

<sup>7</sup>Pieper, Leisure: The Basis of Culture, p. 17.

<sup>8</sup>Robert Lee, Religion and Leisure in America (New York: Abingdon Press, 1964), p. 18.

degenerate in prosperous times."<sup>9</sup> Despite these warnings, research on leisure is limited. Some studies have investigated the influence of certain demographic variables on the use of leisure but few studies have examined the role of personality on leisure behavior, a concept which bears ever more heavily upon the continuance and the enhancement of a culture.

It is probable that Havinghurst studying leisure in middle aged persons was the first to consider seriously the role of personality on leisure. His findings support the proposition that "leisure activity is an aspect of personality. It is a response to personality needs, being one of the ways by which people express themselves."<sup>10</sup> More recently, Ibrahim and Howard have examined the influence of certain personality variables on leisure. Ibrahim studied recreational preference and personality using the statistical technique of univariate analysis of variance,<sup>11</sup> and Howard, analyzing the data with multivariate procedures, investigated the effect of personality on a broader range of leisure

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<sup>9</sup>de Grazia, Of Time, Work, and Leisure, p. 12.

<sup>10</sup>Robert J. Havinghurst, "The Leisure Activities of the Middle Aged," American Journal of Sociology 63 (September 1957): 161.

<sup>11</sup>Hilmi Ibrahim, "Recreational Preference and Personality," Research Quarterly 40: 76-83.

activities.<sup>12</sup>

The subjects of the present study included only women who were resident students at a Catholic college because no previously published studies on leisure had used this group exclusively. The relationships of certain personality characteristics in these women and their preference for selected leisure activities were analyzed. A Student Personnel Staff's view of leisure activities by college women was also compared with the students' self-reported activities. Throughout this study, the classical definition of leisure was used (ut supra). The subjects were made aware of this definition before the administration of the Leisure Activity Survey. The California Psychological Inventory, devised "for use with normal subjects,"<sup>13</sup> was used to assess certain personality characteristics. Data were analyzed using canonical correlation, multivariate analysis of variance and multiple correlation procedures. The study was an attempt to contribute to the already existing research concerning leisure.

#### PURPOSE OF THE STUDY

The purpose of this research was to study the use of

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<sup>12</sup>Dennis Howard, "Multivariate Relationships Between Leisure Activities and Personality" (Ph.D. dissertation, Oregon State University, 1974), pp. 1-96.

<sup>13</sup>Harrison G. Gough, California Psychological Inventory Manual (Palo Alto, California: Consulting Psychologists Press, 1969), p. 5.

leisure by college women. The relationships of certain personality characteristics in college women to their use of leisure was investigated. In addition, self-reported preferences of leisure activities by the students were compared with preferences attributed to them by a Student Personnel Staff in order to ascertain the understanding of the staff concerning the choices of the leisure activities made by the students. Finally, the relationship between groups of personality characteristics of college women and the kinds of leisure activities in which the students engaged were examined.

#### IMPORTANCE OF THE STUDY

In recent years, Americans have experienced an increasing amount of free time. With this additional free time, persons enjoy increased leisure, or they experience an ensuing restlessness which may only be alleviated by filling the time with work. When persons fill free time with work, they lose the opportunity to experience leisure.<sup>14</sup>

De Grazia believes that one can judge the inner health of a land by the capacity of its people to do nothing--to lie abed musing, to amble about aimlessly, to sit having a coffee--because whoever can do nothing, letting his thoughts go where they may, must be at peace with himself.<sup>15</sup>

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<sup>14</sup>de Grazia, Of Time, Work, and Leisure, p. 409.

<sup>15</sup>Ibid., p. 341.

When individuals have no opportunity to perform activities for their intrinsic value, students of leisure predict the disintegration of the culture,<sup>16</sup> because "culture depends for its very existence on leisure."<sup>17</sup>

Leisure is viewed as a state of being. A leisure activity is that which is performed for its own sake.<sup>18</sup> Because leisure classically is defined as a state of being and a leisure activity as that which is engaged in for its own sake, it is important that a study concerning leisure include such areas as creative-aesthetics, relaxation, and the intellectual, physical, political-social, and religious dimensions. Although Kelly's questionnaire included some religious activities,<sup>19</sup> no study to date includes the religious (reflective), intellectual, and political aspects in its definition of leisure activities. These areas have been included in the present study.

Research on leisure had been conducted with college men as subjects, or with both men and women, but no studies

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<sup>16</sup>Ibid., p. 12; and Lee, Religion and Leisure in America, p. 18.

<sup>17</sup>Pieper, Leisure: The Basis of Culture, p. 17.

<sup>18</sup>de Grazia, Of Time, Work, and Leisure, pp. 14-15.

<sup>19</sup>John R. Kelly, "Three Measures of Leisure Activity: A Note on the Continued Incommensurability of Oranges, Apples and Artichokes," Journal of Leisure Research 5 (Spring 1973): 59.

had been done using only college women.<sup>20</sup> With the recent emergence of greater numbers of women in the world of work, a study of college women's use of leisure is ever more imperative. College women generally have not yet been employed full time and therefore are not as prone to fill empty hours with work.

This study attempts to aid young women, and those who are involved in their development, to realize a greater understanding of the importance of meaningful use of free time. The relationship of personality and choices of leisure was studied. An examination was made to ascertain whether a Student Personnel Staff was aware of the leisure activities in which students took part. Through the resultant profiles of uses of leisure by persons with certain personality characteristics, Student Personnel Staffs will be able better to provide guidance to women who come to them with similar personality patterns.

#### OBJECTIVES OF THE STUDY

Objectives of this research include:

1. To provide further research for understanding human behavior;

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<sup>20</sup>George A. Lowrey, Jr., "A Multivariate Analysis of the Relationship Between Selected Leisure Behavior Variables and Personal Values" (Ph.D. dissertation, University of Illinois, 1969), p. 109.



2. To complete an empirical study using a comprehensive view of leisure, thus providing a broader concept;
3. To allow Deans of Students' Staffs to provide opportunities for greater choices of leisure;
4. To provide Directors of Student Life or Activities with greater understanding of the interaction of personality and uses of leisure for the purpose of developing more appropriate programs;
5. To aid college counselors in facilitating student development by providing additional information concerning human behavior in the use of leisure;
6. To aid placement officers by providing them with relevant information concerning the leisure interests of the students, thus enabling them to assist students in making job choices congruent with their interests; and
7. To provide a stronger basis for research on leisure.

#### RESEARCH HYPOTHESES

The following include the research hypotheses to be tested:

1. Preference for selected leisure activities by college women differs with their personality characteristics.

It is hypothesized that there is no significant relationship between the 18 personality scales of the California Psychological Inventory and the six areas of leisure use in the Leisure Activity Survey.

2. It is hypothesized that there is no significant difference in self-reported preferences of leisure in college women and preferences attributed to them by Student Personnel Staff.
3. There is no relationship between the classes of personality characteristics of college women as determined by the CPI and the kinds of leisure activities in which they engage. It is conjectured:
  - a. There is no significant relationship between measures of Poise, Ascendancy, Self-Assurance, and Interpersonal Adequacy (Class I in the CPI) and the kinds of leisure activities in which college women engage.
  - b. There is no significant relationship between measures of Socialization, Maturity, Responsibility and Intrapersonal Structuring of Values (Class II in the CPI) and the kinds of leisure activities in which college women engage.

- c. There is no significant relationship between measures of Achievement Potential and Intellectual Efficiency (Class III in the CPI) and the kinds of leisure activities in which college women engage.
- d. There is no significant relationship between measures of Intellectual and Interest Modes (Class IV in the CPI) and the kinds of leisure activities in which college women engage.

#### DEFINITION OF TERMS

Leisure is a "condition or a state--the state of being free from the necessity to labor."<sup>21</sup>

Leisure Activity consists of an action "which is performed for its own sake or for its own end."<sup>22</sup>

Leisure Activity Survey is a questionnaire that measures an individual's appraisal of the actions in which he engages for their own sake.

Personality is "an individual's characteristic pattern of behavior and thought."<sup>23</sup>

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<sup>21</sup>de Grazia, Of Time, Work, and Leisure, p. 14.

<sup>22</sup>Ibid., p. 15.

<sup>23</sup>CRM Books Editorial Staff, Psychology Today: An Introduction (Del Mar, Cal.: CRM Books, 1970), p. 691.

Psychological Inventory measures an individual's appraisal of his own personality by means of a questionnaire.<sup>24</sup>

Student Personnel Staff is made up of a group of persons including behavioral scientists who apply knowledge and principles derived from social and behavioral sciences to higher education,<sup>25</sup> to facilitate the students' total development.<sup>26</sup>

#### LIMITATIONS OF THE STUDY

1. Because every aspect of one's personality may not be assessed in a single inventory, only those characteristics of personality measured by the California Psychological Inventory are considered in this study.
2. Because students are generally unaccustomed to determining an activity which is performed for its own end, and because the purpose of an activity may be twofold, it becomes a complex task for them

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<sup>24</sup>Ibid.

<sup>25</sup>Ralph F. Berdie, "Student Personnel Work: Definition and Redefinition," in College Student Personnel, ed. Laurene E. Fitzgerald, Walter F. Johnson, and Willa Norris (Boston: Houghton Mifflin Company, 1970), p. 12.

<sup>26</sup>John H. Russel, "Some Points of Concern in Student Services Administration," The Journal of College Student Personnel 7 (July, 1966): 242.

to choose a leisure activity when completing the Leisure Activity Survey.

3. Results of the study may be generalized to include only the sample population of resident upperclass women students at the College of Saint Teresa during the academic year 1974-75.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### HISTORICAL BACKGROUND

The study of leisure has concerned some thinkers since the early Greek philosophers gathered for discussions at the symposium, the gymnasium, and the banquet. The term 'leisure' comes from the Greek word scholē (σχολή); 'leisure' and scholē are synonymous. The term scholē meant "to halt or cease, hence to have quiet or peace."<sup>1</sup> "Leisure is a condition or a state--the state of being free from the necessity to labor."<sup>2</sup> It is active, though the kind of activity does not necessarily take a visible form. Pure speculation and contemplation are considered the highest forms of leisure. Leisure is an activity performed for its own sake or as its own end.

'School' also comes from the Greek scholē, thus the term does not mean a place to educate or to teach, but it means leisure.<sup>3</sup> Such a conception is far removed from the

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<sup>1</sup>Sebastian de Grazia, Of Time, Work, and Leisure (New York: Twentieth Century Fund, 1962), p. 12.

<sup>2</sup>Ibid., p. 14.

<sup>3</sup>Josef Pieper, Leisure: The Basis of Culture (New York: Pantheon Books, 1963), p. 20.

twentieth century's general notion of 'school'.

Ascholia (*δοχολία*) to the Greek, or the absence of leisure, is more like our idea of work. No occupation can then be considered leisure.

Because the Greeks viewed leisure as an activity, they employed the word argia (*ἀργία*) signifying 'idleness'. In some cases, however, translations err by identifying argia as 'leisure'.<sup>4</sup> They are not identical.

Plato gives scholē three distinct meanings: 'spare time', 'freedom' and 'self-expression'. As 'spare time', the subject engages in activities which are not made possible by work nor are they work related. As 'freedom', the subject's activities are distracted by no other activities. As 'self-expression', unrelated sentiments and emotions do not distract the subject.<sup>5</sup>

Aristotle viewed leisure in a more encompassing manner. To him, "leisure is the center-point about which everything revolves."<sup>6</sup>

After the founding of the Olympic Games in 776 B. C., the Greeks exercised and trained. For young athletes and for middle-aged men, the gymnasium was used in leisure.

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<sup>4</sup>James F. O'Leary, "Skole and Plato's Work Ethic," Journal of Leisure Research 5 (Spring 1973): 51.

<sup>5</sup>Ibid., p. 50.

<sup>6</sup>Pieper, Leisure: The Basis of Culture, p. 21.

Greeks who had no need to work gravitated to the gymnasium to work out and to exchange ideas.<sup>7</sup>

From Athens, the concept of leisure passed into Rome. The Latin otium meant leisure and negotium the negation of leisure, or work. However, at this time the concept began to change. "Otium was not conceived of for its own sake but rather for the sake of negotium."<sup>8</sup> That is, a man rests or re-creates himself after he is occupied by his affairs. This veering away from the Greek definition of leisure may be understood better when one looks at the Romans as a people busy about conquering the world, possessed of a driving need for challenge and effort,<sup>9</sup> and not much concerned about the exchange of ideas in the symposium.

With the advent of Christianity, the promotion of contemplation as the highest form of activity recurred. "The Christian and Western conception of the contemplative life is closely linked to the Aristotelian notion of leisure."<sup>10</sup> A distinction was made between the artes liberales (the liberal arts) and the artes serviles (servile

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<sup>7</sup>Gilbert Highet, "Greeks and Romans at Their Ease." Horizon 11 (Spring 1969): 9.

<sup>8</sup>de Grazia, Of Time, Work, and Leisure, p. 22.

<sup>9</sup>Highet, "Greeks and Romans at Their Ease," p. 9.

<sup>10</sup>Pieper, Leisure: The Basis of Culture, p. 21.



work).<sup>11</sup> The connotation was that the liberal arts were an exercise in leisure and servile work was physical.

Gradually, by the time of the Renaissance in the fifteenth century, the idea of work became prominent, and leisure then became used for rest or for whatever one wished after his daily work was finished. The stress was placed on work.<sup>12</sup>

From primitive times, days of celebration were held.<sup>13</sup> These were periods of leisure for rich and poor alike. The Jews introduced the Sabbath, one day of rest or leisure every seventh day. "For the thoughtful man leisure is the Sabbath in which he can have a conversation with his soul."<sup>14</sup> From this Jewish tradition came the Christian holy days (about 115 per year during the Middle Ages).<sup>15</sup> Economic necessity, however, was used as the rationale for reducing this number.<sup>16</sup> Sundays remained as holy days. American holidays evolved when the people wished to celebrate days

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<sup>11</sup>Ibid.

<sup>12</sup>de Grazia, Of Time, Work, and Leisure, p. 33.

<sup>13</sup>Robert Lee, Religion and Leisure in America (New York: Abingdon Press, 1964), p. 127.

<sup>14</sup>de Grazia, Of Time, Work, and Leisure, p. 10.

<sup>15</sup>Encyclopedia of the Social Sciences, "Leisure," by Ida Craven, cited by Larrabee, Eric and Meyersohn, Rolf, eds. Mass Leisure (Glencoe, Ill.: Free Press, 1958), pp. 6-7.

<sup>16</sup>Lee, Religion and Leisure in America, p. 138.

which had meaning for this country, i.e., Independence Day and Thanksgiving.<sup>17</sup>

### DIMENSIONS

De Grazia, author of probably the most comprehensive study of leisure, found that time is a major element in leisure and work because both are measured in temporal terms. Time is considered free when one is not working. Work is seen as the opposite of free time. Leisure and free time would seem then to be the same. Such is not the case. Many persons have free time; not many have leisure. Leisure is defined by de Grazia as "a state of being in which activity is performed for its own sake or as its own end."<sup>18</sup> Since leisure is an idea which cannot be fully realized, it is an ideal. Leisure refers to a state of being, a condition of man which few desire and even fewer achieve. Leisure cannot exist where people do not know its meaning. Leisure is personal and cannot definitely be pinned down. To measure leisure is to measure something else, usually oneself.<sup>19</sup>

Leisure, as seen by Roberts, is not rigidly segregated into an isolated compartment of life. Leisure pervades and is pervaded by numerous other activities and any attempt to

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<sup>17</sup>Ibid., p. 139.

<sup>18</sup>de Grazia, Of Time, Work, and Leisure, p. 15.

<sup>19</sup>Ibid., pp. 7-9.

measure it precisely either in terms of time or money is unrealistic and invalid. Leisure is an elusive part of life, and differentiating it from work or other obligations can provide a realistic approach to the study of leisure.<sup>20</sup>

Leisure can be considered in terms of service to society. Parker explains three ways society is served by leisure:

1. It helps people learn to play their parts in society.
2. It helps them to achieve societal or collective aims.
3. It strengthens the cohesive bonds of society.<sup>21</sup>

Dumazedier maintains that leisure has three main functions: relaxation, entertainment, and personal development. He explains that relaxation permits recovery from fatigue, that entertainment provides a means to overcome boredom, and that personal development is promoted by leisure because it serves to free the individual from the daily pressures of thought and action.<sup>22</sup>

From the dimensions of leisure mentioned thus far, questions arise. Gould asks:

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<sup>20</sup>Kenneth Roberts, Leisure (London: Longman, 1970), pp. 7-8.

<sup>21</sup>Stanley Parker, The Future of Work and Leisure (Englewood Cliffs: Prentice-Hall, 1960), p. 55.

<sup>22</sup>Joffre Dumazedier, Toward a Society of Leisure (New York: Free Press, 1967), pp. 15-16.

An activity like essay writing, for example, is designated as learning if school credit is given, as work if pay is given, and as play if neither credit nor pay is given. Why is nature study considered play on a camping vacation with the family, but considered education on a field trip with the class? Is editing the school paper education or work for the future journalist? If weaving in a school workshop, in a craft workshop and in a local craft-industry co-op involve the same functions and tasks, when is it work experience, learning or play? Is this determined by the individual's present vocation, future vocation or hobby, or by the presence or absence of rewards?<sup>23</sup>

Lee places the element of time in his definition while striving to maintain an element of freedom and choice. For him, "leisure is that time during which we are free to choose what we wish to do within the range of our personal freedom."<sup>24</sup> Green also noted the paradox. Leisure when viewed as free time is attainable; however, he believes that leisure in the classic sense seems impossible to achieve.<sup>25</sup>

The quandary continues. As Neulinger and Raps summarize, leisure in the classical sense implies an activity engaged in for its own sake and in the modern sense is a period of time in which one is free to do as he chooses.<sup>26</sup>

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<sup>23</sup>Karolyn Gould, "Life Styles for Tomorrow," New Generation 51 (Winter 1969): 29.

<sup>24</sup>Lee, Religion and Leisure in America, p. 28.

<sup>25</sup>Thomas F. Green, Work, Leisure, and the American Schools (New York: Random House, 1968), p. 74.

<sup>26</sup>John Neulinger and Charles S. Raps, "Leisure Attitudes of an Intellectual Elite," Journal of Leisure Research 4 (Summer 1972): 197.

From a survey of attitudinal dimensions of leisure, Neulinger and Briet state that leisure may be classified into three broad categories:

1. Those that emphasize leisure as discretionary time.
2. Those that emphasize discretionary activity.
3. Those that consider leisure a state of mind.<sup>27</sup>

In striving to quantify it, some authors discuss leisure principally in temporal terms. Brightbill sees the idea of leisure as a block of time, spare time, or free time in which we may rest or do what we choose.<sup>28</sup> Leisure is looked upon as an opportunity rather than a problem, an opportunity for enriching our lives. Leisure allows us an opportunity to live life in a personally satisfying way. It can give spark and add significance to the most precious concepts of life. Through self-fulfillment in leisure, meaning is added to the totality of life.<sup>29</sup>

The psychiatrist, Werner Mendel, quite simply sees leisure as time not filled with work. This time, Mendel believes, is fraught with problems.<sup>30</sup>

Owens equates leisure with consumption time, that is,

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<sup>27</sup> John Neulinger and Miranda Breit, "Attitude Dimensions of Leisure," Journal of Leisure Research 1 (Summer 1969): 256.

<sup>28</sup> Charles K. Brightbill, The Challenge of Leisure (Englewood Cliffs: Prentice-Hall, 1960), p. 18

<sup>29</sup> Ibid., p. 109.

<sup>30</sup> Werner M. Mendel, "Leisure: A Problem for Preventive Psychiatry," American Journal of Psychiatry 127 (June 1971): 1688-1689.

time devoted to activities which are primarily carried on for their own sake.<sup>31</sup> Although Walter Karp stresses 'the good life' in his description of leisure, one may see a similarity in the dimensions of the concepts of Karp and Owens. Karp states, "the good life in most times and places has been a life of leisure, or rather a mode of life made possible by large allotments of free time."<sup>32</sup>

The time after one's job cannot all be termed 'leisure' according to Halliday. There are tasks which must be accomplished and which he sees as outside the realm of leisure.

After your tasks are done--that may be the key to the true meaning of leisure. We all have promises to keep, and it is only with the feeling that our obligations are at least temporarily discharged that we can experience the true sense of leisure.<sup>33</sup>

Howard defines leisure similarly as "time when alternative activity choices exist relatively free from obligation. The essence of this view is that of discretion over the use of time."<sup>34</sup>

Referring to 'leisure time' rather than to 'leisure', Anker states it "is a time of 'involvement'. It is a time to face the problems of social responsibility and these

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<sup>31</sup>John D. Owen, The Price of Leisure (Rotterdam: Rotterdam University Press, 1969), p. 57.

<sup>32</sup>Walter Karp, "Leisure and the Good Life," Horizon 11 (Spring 1969): 1.

<sup>33</sup>E. M. Halliday, "Leisure," Horizon 11 (Spring 1969): 6.

<sup>34</sup>D. R. Howard, "Multivariate Relationships Between Leisure Activities and Personality," (Ph.D. dissertation, Oregon State University, 1974), p. 9.

problems are the intimate, crucial concerns of us all."<sup>35</sup>  
 Martin speaks of 'free time' because he believes the term  
 'leisure' has proven to be a "nebulous, ambiguous, and untenable working concept."<sup>36</sup>

In his doctoral dissertation List studies leisure and finds

that only by teaming the physical and emotional resources of [man's] being with the rational-intellectual can he gain control over his internal and external environment and come to determine what he will be, do and bear, and thereby achieve the dynamic conditions of leisure and self-fulfillment.<sup>37</sup>

List's view of leisure is possibly the most encompassing of all the concepts. He weds the physical, emotional, and intellectual resources in man with his environment to achieve a concept of leisure and then equates that with self-fulfillment.

Beyond the dimensions of leisure studied thus far may be found those which could be considered tangential and others which may be totally unrelated to the concepts previously presented. Wolf believes one may be 'factored' in order to ascertain what each individual really would like to do with and in his life. That is, a person would draw up a profile of himself and it would be used for determining his

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<sup>35</sup>Walter Anker, "Back to First Principles," The Clearing House 43 (October 1969): 98.

<sup>36</sup>Alexander Reid Martin, "Idle Hands and Giddy Minds," American Journal of Psychoanalysis 29 (1969): 147.

<sup>37</sup>Hugo Karl List, "Approach to a Definition of Leisure," (Ph.D. dissertation, Michigan State University, 1966), ii.

likes and dislikes, his capabilities and his shortcomings.<sup>38</sup>  
As far removed as this may be from the dimensions studied, this is Wolf's view of leisure, a view tied heavily to one's occupation.

Leisure as an instrumental conception is proposed by Noe. He believes when one generally describes leisure, it is as the antithesis of work and is, therefore, centered upon the adult, working, middle-class. Noe suggests that the adolescent falls into a forgotten category and that one dimension of leisure should include him. Leisure, then, as he sees it, is an instrument or a means of achieving adult standards and thus is a process. Changing leisure to an instrumental from an expressive dimension alters the meaning of the word, according to Noe. When an adolescent becomes involved in leisure activities, he does so for a specific reason or purpose. Noe believes this purpose is for the acquisition of social habits and patterns which lead to adulthood. Thus, the involvement of the adolescent in leisure contributes to part of the socialization process for him.<sup>39</sup> Studying culture in America, Margaret Mead finds that "leisure is something that has to be earned and re-

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<sup>38</sup>William Wolf, "Dealing Constructively with Our Increased Leisure," American Journal of Psychotherapy 24 (July 1970): 449.

<sup>39</sup>Francis Noe, "An Instrumental Conception of Leisure for the Adolescent," Adolescence 4 (Fall 1969): 385-399.



earned. ...Unearned leisure is something which will have to be paid for later."<sup>40</sup>

Finally, the philosopher Josef Pieper, considers the soul of leisure as celebration. He wrote, "celebration is the point at which the three elements of leisure come to focus: relaxation, effortlessness, and superiority of active leisure to all functions."<sup>41</sup> He sees celebration as the core of leisure and, this being the case, leisure can be "made possible and justifiable on the same basis as the celebration of a festival."<sup>42</sup>

### PROBLEMS

Several problems arise when one studies leisure. Possibly the most basic problem comes from the lack of understanding concerning the meaning of leisure. Anker points to one educator who "categories 'leisure time' as junk and obviously not worth his exalted attention."<sup>43</sup> Anker believes the opinions of some range from opinions similar to the above statement, to viewing 'leisure time'

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<sup>40</sup>Margaret Mead, "The Pattern of Leisure in Contemporary American Culture," The Annals of the American Political and Social Science 313 (September 1957): 11.

<sup>41</sup>Pieper, Leisure: The Basis of Culture, p. 56.

<sup>42</sup>Ibid.

<sup>43</sup>Anker, "Back to First Principles," p. 98.

simply in terms of 'recreation'.<sup>44</sup> De Grazia finds that leisure must be disabused from free time and he asserts that "leisure cannot exist where people do not know what it is."<sup>45</sup> De Grazia thinks there are three

good reasons why people might not take leisure though the opportunity existed: first, there may be no strong tradition of leisure; second, in its absence, forces opposed to leisure, unless stopped, may intervene to bring not a new tradition but a follow-the-piper, day-to-day pattern for work, free time, and money spending. ...and, [third] leisure may be beyond the capacity of most people.<sup>46</sup>

Advertising probably more than anything else serves to propagate confusion in understanding leisure. The environment is full of slogans, yet Americans are uneasy in discussions about leisure, leading one to the conclusion that the public has not yet formed an attitude toward leisure.<sup>47</sup> There is no diminution in the creation of needs and wants. Advertisers maintain contentment must be uprooted. There is persistent pressure by public relations men to sell and to consume.<sup>48</sup> As the advertisers push greater consumption, the demand for products grows and the problem turns to production and work.

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<sup>44</sup>Ibid.

<sup>45</sup>de Grazia, Of Time, Work, and Leisure, p. 8.

<sup>46</sup>Ibid., p. 369.

<sup>47</sup>Noe, "An Instrumental Conception of Leisure for the Adolescent," pp. 386-388

<sup>48</sup>Wolf, "Dealing Constructively with Our Increased Leisure," p. 447.

Some are of the opinion that the concept of leisure should be relegated to a minor role in life if it is given any place at all. The well-known statement "one does not work to live; one lives to work," expresses their current thought. This idea reverses the order of things and stands them on their heads.<sup>49</sup> Mendel believes that we live in a work-oriented society, "that it is essentially anti-pleasure, anti-creativity, anti-joy, anti-leisure, and anti-laughter."<sup>50</sup>

Mead states that leisure is something a person must earn and re-earn. A child earns by learning and growing, and an adult earns by working. This type of earning is equated with a paycheck;<sup>51</sup> one does a certain amount of work for a certain sum of money.

Karp, viewing the idea of leisure in other civilizations, believes there are few that would agree with the American idea of 'the good life' as encompassing "unremitting labor and ceaseless productive enterprise."<sup>52</sup> These, in most cultures, are unworthy substitutes for 'the good life', and he points out that Americans erroneously refer to 'standard of living' when they really mean the

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<sup>49</sup>Pieper, Leisure: The Basis of Culture, p. 20.

<sup>50</sup>Mendel, "Leisure: A Problem for Preventive Psychiatry," p. 1690.

<sup>51</sup>Mead, "The Pattern of Leisure in Contemporary American Culture," p. 10.

<sup>52</sup>Karp, "Leisure and the Good Life," p. 1

'standard of consumption.'<sup>53</sup>

When patients in a mental hospital are being rehabilitated, they are assisted in their use of leisure. However, at times this means they are taught how to paint, how to sing, and how to play. Subtly, they are being rehabilitated back into the work force rather than being involved at the time in a meaningful activity<sup>54</sup> which will enhance their view of themselves.

Historically, free time has always been regarded by authority as a social problem and it was felt that man should be kept occupied. Little wonder then that Sunday became a day of depression for some.<sup>55</sup> "As free time increased, it was accompanied by a commensurate increase in comparable maladaptation throughout Western culture."<sup>56</sup> And today, this constitutes a socio-psychological problem of primary significance.<sup>57</sup> In fact, Martin believes that "sudden confrontation with free time is an acid test for

<sup>53</sup>Ibid.

<sup>54</sup>E. Mansell Pattison, "The Relationship of the Adjunctive and Therapeutic Recreation Services to Community Mental Health Programs," American Journal of Art Therapy 9 (October 1969): 9.

<sup>55</sup>Martin, "Idle Hands and Giddy Minds," p. 147.

<sup>56</sup>Ibid., p. 148.

<sup>57</sup>Ibid.

revealing certain neurotic dispositions."<sup>58</sup>

For some, leisure is directly related to advancement in technology. As technology increases, so too, does leisure.<sup>59</sup> Indeed, there are persons in some occupations who find them as demanding as ever, but there are persons whose more or less routine jobs allow for greater leisure. It is these persons with increased leisure who have the least resources for using this time creatively. They are finding more time on their hands.<sup>60</sup>

Both Ibrahim and Ziegler state their concern that the misuse of free time is detrimental to the culture.<sup>61</sup> It is also a misuse to identify idleness as leisure. "No reasonably healthy person would normally choose idleness as a lifetime activity;"<sup>62</sup> such is not the case with leisure. In his discussion of juvenile delinquency as a tragic use of leisure, Lee states that observers must not overlook "boredom as a contributing source in their understandable attraction to the most obvious conditions that give rise to

<sup>58</sup>Ibid., p. 149.

<sup>59</sup>Brightbill, The Challenge of Leisure, p. 18.

<sup>60</sup>Parker, The Future of Work and Leisure, p. 11.

<sup>61</sup>Hilmi Ibrahim, "Recreational Preference and Personality," Research Quarterly 40 (1969): 76; and Earle F. Zeigler, "Recreational Interests of Undergraduate Men Physical Education Majors," Research Quarterly 30 (1959): 486.

<sup>62</sup>Wolf, "Dealing Constructively with Our Increased Leisure," p. 440.

deviant behavior."<sup>63</sup>

From ancient times schools were places where leisure was encouraged. However, de Grazia finds that schools today "have done an efficient job in denying the leisure tradition."<sup>64</sup> Each facet of the three R's has a purpose; a student no longer learns for the sake of learning.<sup>65</sup> The faculty, too, is required to produce. There is an "increase in school bureaucracy, of machine and paper work... [to] insure that leisure sets no foot on campus."<sup>66</sup>

Another author does not see leisure as a problem. He concedes that if there were a problem, it would probably be in terms of quality and not quantity.<sup>67</sup>

#### USES

An examination of the uses of leisure includes both positive and negative aspects. Some authors view leisure as the epitome of freedom and as a means of inner growth for the individual. Other authors believe leisure is dependent on one's occupation or they describe it solely in terms of activities performed (ut infra).

Skinner suggests that a sensitive test of the extent

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<sup>63</sup>Lee, Religion and Leisure in America, pp. 106-108.

<sup>64</sup>de Grazia, Of Time, Work, and Leisure, p. 355.

<sup>65</sup>Ibid., p. 264.

<sup>66</sup>Ibid., p. 267.

<sup>67</sup>Halliday, "Leisure," p. 6.

to which a culture promotes its own future is its use of leisure. The epitome of freedom is leisure. The species of man is only prepared for use of short periods of leisure since it is only very recently that leisure time has been expanded to appreciable periods. Leisure is, therefore, "one of the great challenges of those who are concerned with the survival of a culture, because any attempt to control [a person's activity during free time is particularly apt to be] attacked as unwarranted meddling."<sup>68</sup> Pieper agrees with Skinner but extends this concept of leisure by saying "culture depends for its very existence on leisure, and leisure in its turn is not possible unless it has a durable and consequently living link with the cultus, with divine worship."<sup>69</sup> Leisure, Pieper believes, "is a form of silence which is a prerequisite of the apprehension of reality."<sup>70</sup> From the apprehension of reality flows affirmation, and the "highest form of affirmation is the festival. The festival is the origin of leisure."<sup>71</sup>

In simpler terms, Brightbill sees no area which has more in common with re-creation than religion. Both religion and leisure give us a chance to gain perspective in

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<sup>68</sup> B. F. Skinner, Beyond Freedom and Dignity (New York: Alfred A. Knopf, 1971), pp. 169-172.

<sup>69</sup> Pieper, Leisure: The Basis of Culture, p. 17.

<sup>70</sup> Ibid., p. 41.

<sup>71</sup> Ibid., p. 43.

life, and are greatly dependable in helping to restore depth and quality to our lives.<sup>72</sup>

Recommendations for using leisure run the gamut from the preservation of the culture and the practice of religion, to factoring for leisure and to uses which certain authors have considered abuses. Wolf, who recommends the process of factoring the characteristics of a person to arrive at an individual's profile, did so in order to allow a person to change occupations as his profile changes. He made this recommendation as a means of using increased leisure more constructively.<sup>73</sup> It is difficult, after studying the many dimensions of leisure, to fit this concept into any but the most work-oriented view, one which considers leisure a waste of time in terms of its classical definition.

Lamott sees leisure being used destructively as he notes young people "get stoned and make love without prudence and contract gonorrhea and get abortions and sometimes boost cars."<sup>74</sup> More specifically, he points to two young couples who "exchanged partners permanently and sorted out the children."<sup>75</sup> These, he thinks, are abuses of

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<sup>72</sup>Brightbill, The Challenge of Leisure, p. 37.

<sup>73</sup>Wolf, "Dealing Constructively with Our Increased Leisure," p. 449.

<sup>74</sup>Kenneth Lamott, "A Few Hazards of the Good Life," Horizon 11 (Spring 1969): 28.

<sup>75</sup>Ibid., p. 29.



leisure.

Other authors consider both positive and negative uses of leisure. Pattison mentions his serious concern about how some Americans deal with their increasing leisure time. They attempt to fill the vacuum by getting a second job, by making a hobby into a vocation, by turning sports into a profession, or by fleeing from reality into the "ubiquitous cocktail glass."<sup>76</sup> Pattison believes, however, that leisure can and should have an enriching quality. He quotes Bob Hoke:

It is in the realm of leisure, not through passive amusement, but through creative play, that an individual's character blossoms and bears fruit, and the humanization of man takes place.<sup>77</sup>

The average American, according to Halliday, fills his leisure with television spectator sports, and do-it-yourself projects when he is not moonlighting. He believes, however, that adult play should include all the arts because, as Mark Van Doren remarked, "Man is at the most man when his mind is at play."<sup>78</sup>

Lee elaborates on the element of play in contemporary life. In this concept he includes sports, business and professional life, clubs and societies, the military, and

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<sup>76</sup>Pattison, "The Relationship of the Adjunctive and Therapeutic Recreation Services to Community Mental Health Programs," p. 10.

<sup>77</sup>Ibid., p. 11.

<sup>78</sup>Halliday, "Leisure," pp. 6-7.

everyday social interaction.<sup>79</sup>

The term 'play', for de Grazia, is used much like that of Van Doren. De Grazia says, "The man of leisure is always at play--since his delight is in the play of the mind."<sup>80</sup>

Acquired and external resources should never be considered substitutes for inner resources; they may be supplements. Martin contends that we have a responsibility for creative adaptation to free time, and this adaptation must lie with our inner resources.<sup>81</sup> Noe, too, believes leisure activities exist not only to recreate and relax a person but that they have a deeper purpose. That is, they "function to develop and train one in the fundamental values of society."<sup>82</sup>

Education, also, may be viewed as an activity of leisure, or one may see education used to make leisure a more meaningful and growth-producing experience, that is, education for leisure. If education is indeed an activity of leisure, Gould suggests that students should have the right to voluntarily drop in or out of school. She believes the student's leisure may be used more effectively by being an assistant forest ranger, enjoying nature, solitude and

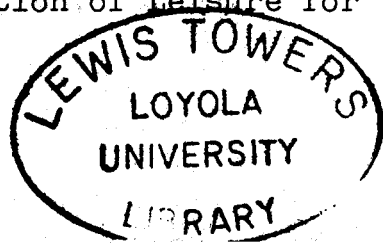
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<sup>79</sup>Lee, Religion and Leisure in America, pp. 54-68.

<sup>80</sup>de Grazia, Of Time, Work, and Leisure, p. 374.

<sup>81</sup>Martin, "Idle Hands and Giddy Minds," p. 149.

<sup>82</sup>Noe, "An Instrumental Conception of Leisure for the Adolescent," p. 395.



rest. Later, when he feels the need, he may again resume some type of formal education.<sup>83</sup>

Noe, viewing education as an activity of leisure, considers that leisure carries out part of the socialization process for the adolescent. Thus, in order to become socialized an adolescent must actively use leisure.<sup>84</sup>

Lamott believes there is a great need for positive uses of leisure. He sees one positive use as education because students need to get involved and to do something meaningful.<sup>85</sup>

Anker believes schools must educate for leisure. He is of the opinion that "schools need to bring about a dedication to time for reading; to time for contemplation; to time for the spiritual life; to time for helping others."<sup>86</sup>

Mendel sees a need for a vast change in our educational system. He thinks that the present system is dooming the next generation to an epidemic of psychological depression.

We must prepare our children to play, joke and have fun as a significant and worthwhile aspect of their lives. We must train ourselves and our children to use tools with which they can live lightheartedly and creatively. This can only be done if we instill a system of values that is based on the economic and social realities of

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<sup>83</sup>Gould, "Life Styles for Tomorrow," pp. 31-32.

<sup>84</sup>Noe, "An Instrumental Conception of Leisure for the Adolescent," p. 395.

<sup>85</sup>Lamott, "A Few Hazards of the Good Life," p. 28.

<sup>86</sup>Anker, "Back to First Principles," p. 98.

the 1970's.<sup>87</sup>

Brightbill states that education for leisure is imperative. This education must begin in the home and continue through school<sup>88</sup> and into later life if it is to be truly developmental and effective.

When we say education for leisure, we have in mind persons developing associations, interests, skills and opportunities that will enable them to use their leisure in personally rewarding ways, plus understanding why this way of life is essential to their well being and to the survival of society.<sup>89</sup>

The late President Hoover was quoted by Martin:

'The future history of this civilization will not depend upon what a man does at his work, but what he does in his time off.' This education for life off the job is a multi-disciplinary responsibility, involving all the arts, sciences and humanities. It necessitates not only academic but psychological, emotional, physical and spiritual preparedness. Such education should encompass and engage the whole man. Not only the literal-minded, rational, logical, deductive man, which has been the principal and sometimes the only focus of work-culture education, but also the poetic-minded, non-rational, analogical, contemplative, inductive man.<sup>90</sup>

## STUDIES

Research concerning the influence of personality on the use of leisure is limited. Ruth Campbell completed a study of the relationship between personality, work, and

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<sup>87</sup>Mendel, "Leisure: A Problem for Preventive Psychiatry," pp. 1690-1691.

<sup>88</sup>Brightbill, The Challenge of Leisure, p. 94.

<sup>89</sup>Ibid., p. 93.

<sup>90</sup>Martin, "Idle Hands and Giddy Minds," p. 153.

leisure as it applied to men who work. No relationship was found between Leisure Congruence or Work Congruence and Work Satisfaction, or Leisure Congruence or Work Congruence and Leisure Satisfaction. However, the data did reveal that Leisure Satisfaction had a significant correlation with Work Satisfaction. Thus, it may be inferred that Leisure Satisfaction could be predicted from Work Satisfaction for men who work.<sup>91</sup>

A study of the multivariate relationships between leisure activities and personality was conducted by Howard. The subjects were high school students in grades 10-12. Selected variables of personality as measured by the Personality Research Form were found to be significantly related to leisure activity preferences. The use of selected personality variables substantially increased the probability of predicting leisure activity preferences correctly.<sup>92</sup>

Ibrahim examining the influence of personality on recreational preference asked two questions. First, would the recreationally inclined individual's personality differ from one who was not so inclined? Second, would the individuals who are inclined toward certain activities have

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<sup>91</sup>Ruth M. Campbell, "A Study of the Relationships between Personality, Work and Leisure as it Applies to Men Who Work," (Ph.D. dissertation, State University of New York at Buffalo, 1973), 1-99.

<sup>92</sup>Howard, "Multivariate Relationships Between Leisure Activities and Personality," pp. 1-96.

personalities which differed from individuals who are inclined toward other activities? Despite the occurrence of significant differences in personality traits among some groups, statistical relationships were not strong enough to reject the null hypothesis. Also, the personality of an individual who is inclined toward certain activities does not differ from one who is inclined toward other activities.<sup>93</sup>

O'Connor studied personality needs involved in choices of several interest groups including: hikers, Great Books members, women golfers and others. The two hypotheses she tested were: that a relationship existed between personality and the choice of a leisure interest group; and that there were significant differences in personality needs of given interest groups and the general population. The results of the study showed that there were relationships between personality needs and choices of leisure interest groups. There were also significant differences between the needs of the participants of the special interest group and those of the general population.<sup>94</sup>

A study by Gibner, using women as subjects, analyzed factors associated with work-leisure attitudes and perceptions of three groups of women. The groups included persons

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<sup>93</sup>Ibrahim, "Recreational Preference and Personality," pp. 76-82.

<sup>94</sup>Constance Ann O'Connor, "A Study of Personality Needs Involved in the Selection of Specific Leisure Interest Groups," (Ph.D. dissertation, University of Southern California, 1970), pp. 1-110.

from a University Continuum Center for Women; from a Dental Auxiliary; and from a Federation of Business and Professional Women's Clubs. Some of the findings include: group differences existed in both Work and Leisure attitudes; and the number of years employed was significantly related with work attitude; women with fewer years of employment had lower work attitude scores.<sup>95</sup>

Several studies on leisure used college students as subjects. Ross examined some early life experiences and social factors related to the leisure activities of one group of college freshmen. Findings indicated that the student's family income and the education of the father had the greatest influence on the rate of participation in recreational activities by the student. Factors of least influence were the number of siblings and the student's place of residence before entering college. Although the freshmen indicated a preference for participation in active leisure, such as sports, they actually participated in more passive types, listening to the radio and reading.<sup>96</sup>

#### Leisure time activities of Manchester College students

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<sup>95</sup>James Wingren Gibner, "An Analysis of Factors Associated with Work-Leisure Attitudes and Perceptions of Three Groups of Women," (Ph.D. dissertation, University of Michigan, 1973), pp. 1-153.

<sup>96</sup>James Pheane Ross, "A Study of Selected Early Life Experiences and Social Factors as Related to Leisure Activity Choices of College Freshmen," (Ph.D. dissertation, University of Kentucky, 1967), pp. 1-212.

were analyzed by Brattain. Data were obtained by means of a questionnaire administered in a convocation. Among the conclusions was the fact that although students wished to take part in active leisure, they actually participated in sedentary types.<sup>97</sup> It may be noted that a similar conclusion was drawn in the Ross study.

Recreational interests of undergraduate male physical education majors were explored by Ziegler. It was predicted that the subjects would rate high insofar as their physical recreational interests were concerned, but they would rate low in communicative, learning, and aesthetic and creative recreational interests. It was thought also that scores would be reasonably high in social interests. Results indicated a high rating in physical recreational interests, a fair rating in social and communicative areas, and a poor rating in areas of aesthetic, creative, and learning recreational interests.<sup>98</sup>

Time utilization was examined by Goodman and Robinson. Goodman studied leisure, work, and the use of time. The study was directed toward assessing the manner in which an individual regarded time utilization and his childhood antecedents. She found that individuals who have an autonomous

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<sup>97</sup>William Edwin Brattain, "An Analysis of the Leisure Time Activities of Manchester College Students," (Re.D. dissertation, Indiana University, 1967), pp. 1-229.

<sup>98</sup>Ziegler, "Recreational Interests of Undergraduate Men Physical Education Majors," pp. 486-491.



style in the use of time in their employment will tend to have the same style in the use of free time. Those who have time organization patterns in employment will tend to have time organization in their free time.<sup>99</sup>

A study by Robinson on television and leisure time utilized twenty-four-hour diaries of respondents representing the employed urban population of the United States. It was found that the time now devoted to television is so great that it has usurped not only the time previously devoted to other mass media but it has also eaten into substantial amounts of time previously spent in other forms of leisure.<sup>100</sup>

Several programs were proposed for the more effective use of leisure. Baiardo described the program in a residence hall which created its own leisure studies classes. Each member of the residence hall staff was expected to teach one class. The faculty met throughout the semester. The students were presented with the idea and told they were eligible for a course simply by coming to the first class meeting. Courses included: classical music, crafts, bike repair, terrariums, yoga, jazz, and natural foods. Students

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<sup>99</sup>Natalie Cohen Goodman, "Leisure, Work and the Use of Time. A Study of Adult Style of Time Utilization, Childhood Determinants and Vocational Implications," (Ed.D. dissertation, Harvard University, 1969), pp. 1-87.

<sup>100</sup>John P. Robinson, "Television and Leisure Time: Yesterday, Today, and (Maybe) Tomorrow," Public Opinion Quarterly 33 (April 1969): 210-222.

were given a questionnaire at the end of the term and the outcome was assessed. Student interest in the program was ongoing. The program facilitated communication among residents and it contributed to the creation of a community within the residence hall. The program also filled a gap in the total education of the college student.<sup>101</sup>

Hartlage, studying leisure, was of the opinion that there would be a growing significance in non-working activities because of the increasing number of leisure hours now available to most persons. For this reason he devised a questionnaire which would allow a person to match his individual interest patterns with appropriate avocational activities. The test was found to be valid and the persons being tested were provided with an average of three avocations which they might like or which would be of benefit to them. Of the group tested, ninety-four percent indicated they intended to take up at least one of the avocations picked for them.<sup>102</sup>

A model for coordinated recreation planning was devised by Hovis. The system "Supply and Demand Information Evaluation (SADIE) possessed three major components:

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<sup>101</sup>Richard P. Baiardo, "A Residence Hall Creates Its Own Leisure Studies Classes," Journal of College Student Personnel 15 (January 1974): 65.

<sup>102</sup>Lawrence C. Hartlage, "The Scientific Management of Leisure," Journal of Clinical Psychology 25 (April 1969): 226-228.

1. A group of recreation/education agencies which provide leisure services to the community;
2. An agency, selected from the participating agencies, which coordinates the group; and
3. An information system to store, retrieve and display materials which assists the group in the decision making process.

The purpose of SADIE is to allow for cooperative decision-making, to eliminate duplication of services, to provide more equitable budgeting, to provide a greater range of services, better staff training and the location or relocation of recreational services near those who need them.<sup>103</sup>

A study done by Kimball dealt with leisure and education for leisure. He found leisure to be an emerging social institution with more and more time devoted to it. The participating subjects felt that the home, school, and church, in that order, should assume the major responsibility for preparing persons to use their leisure. They believed that the school should increase its efforts to develop positive and personal leisure attitudes and skills.<sup>104</sup>

#### SUMMARY

To summarize, 'leisure', in the classical sense,

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<sup>103</sup>Watson B. Hovis, "Community Education: Supply and Demand Information Evaluation," Journal of Health, Physical Education, and Recreation 45 (April 1974): 48-51.

<sup>104</sup>Kenneth Robie Kimball, Jr., "Leisure and Education for Leisure: A Study of an Emerging Priority," (Ed.D. dissertation, State University of New York at Albany, 1967), pp. 1-165.

traces its meaning to the early Greek philosophers, finding its refinement in Aristotelian thought. The Romans incorporated the term 'leisure' into their culture but with some change in the concept. 'Leisure' came to mean a period of re-creation or rest from an occupation.

During the Middle Ages, contemplation was seen as the highest form of activity, indicating a return to the Greek concept of leisure. However, with the approach of the Renaissance, when work became more prominent, 'leisure' again was used to mean 'rest' or 'recuperation'.

From earliest times even to the present, celebrations were held. A celebration is one form of leisure in which all may engage.

The dimensions of leisure are almost as numerous as the authors concerned with the topic. Meanings ranged from the classical definition which considered leisure an attitude of being, and a leisure activity as that which is performed for its own sake,<sup>105</sup> to leisure as free time. Along the continuum between these extremes included dimensions differentiating leisure from work; indicating its function to the individual and to society; and considering leisure the good life or consumption time. Other authors viewed leisure as involvement in social responsibilities, as a means of socialization for adolescents in the adult milieu, and as celebration. One author defined leisure as a total involve-

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<sup>105</sup>de Grazia, Of Time, Work, and Leisure, p. 15.

ment with the environment for an individual's self-fulfillment.

Problems found to exist most certainly centered in a lack of understanding concerning leisure. General and more specific uses of leisure were examined. The most serious concern was the use of leisure for the continuance of the culture. Education, the practice of religion, and play were considered positive leisure activities. Some negative uses of time were considered abuses of leisure.

Though studies of leisure are limited, several were reviewed including those dealing with personality and leisure. Leisure studies using women and college students were examined. The use of leisure was investigated in a few studies, and programs for more effective and creative use of leisure were noted.

This review of the literature on leisure has considered many aspects. In a study whose objective is to apply the principle of the classical definition of leisure throughout, a thorough examination of the topic seemed necessary.

## CHAPTER III

### PROCEDURES AND METHODOLOGY

#### TYPE OF STUDY

Leisure activities in college women were studied. The investigation employed a random sample of 150 students at a Catholic women's college to determine whether their personalities influenced the type and extent of their leisure activities. The Leisure Activity Survey and the California Psychological Inventory were administered to the sample. The Student Personnel Staff also completed the Leisure Activity Survey. They were asked to respond to the survey by indicating the extent to which they thought students involved themselves in each activity.

It was hypothesized that:

1. There is no significant relationship between the 18 personality scales of the California Psychological Inventory and the six areas of leisure use in the Leisure Activity Survey.
2. There is no significant difference in self-reported preferences of leisure activities in college women and preferences attributed to them by Student Personnel Staff.
3. There is no significant relationship between the Classes of personality characteristics of college women, as determined by the CPI, and the kinds of leisure activities in which they engage.

#### INSTRUMENTS USED IN THE STUDY

The instruments used in this study included the

Leisure Activity Survey and the California Psychological Inventory. The Leisure Activity Survey was devised by listing possible leisure activities performed by students at the College of St. Teresa, Winona, Minnesota. A Student Personnel Worker, three faculty members and a student compiled a list of sixty-two activities. The resultant questionnaire consisted of 62 leisure activities and spaces for additional non-listed activities in which students took part. A pilot study was conducted by distributing the questionnaire (Appendix A, page 129) to 161 students (54 Freshmen, 107 Upperclassmen) who responded "little," "some," or "much" to each item. Ten persons from the Student Personnel Staff also completed the questionnaire (Appendix B, page 134) by considering the extent to which they believed the students engaged in each activity. From the results of the pilot study, the questionnaire was refined. For example, if the majority of the students participated "some" or "much" in an activity, the item was made more specific. If a small number of students (under 10) took part in an activity "some" or "much," the item was dropped from the questionnaire or combined with a similar activity.

Seven female experts reviewed the refined questionnaire of approximately 80 items. With the exception of one person who holds a B. A. in English, the experts were Ph. D.'s or Doctoral Candidates in the areas of Guidance and Counseling, Mathematics, Philosophy, Psychology, Student

Personnel, and Social Science. Each had over 10 years' teaching experience, and with the exception of the English major who teaches in high school, all are presently or have been in higher education at Catholic women's colleges in four states: Iowa, Minnesota, New York, and Ohio.

First, the items were reviewed for clarity. Category validation was obtained by asking the experts to place each leisure activity in one of the six areas indicated. If an item was questionable, the expert judged it in context with others she had put in a given category. In some cases, the item was made more explicit. The six areas of leisure activities include: creative-aesthetics, entertainment-relaxation, and the intellectual, physical, political-social, and religious (reflective and service) areas. Determination of these areas was made in part from studies conducted by Witt, Ibrahim and Kelly. Witt's classification of leisure activities include: "sports, outdoor-nature, adolescent-social, and aesthetic-sophisticate."<sup>1</sup> Ibrahim classifies five leisure activity areas: "physical, social, communicative, aesthetic, and learning."<sup>2</sup> Nine general categories of leisure activities were used by Kelly: "community activity; familial activity; home activity; religious activity; work-

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<sup>1</sup>Peter A. Witt, "Factor Structure of Leisure Behavior for High School Age Youth in Three Communities," Journal of Leisure Research 3 (Fall 1971): 218.

<sup>2</sup>Hilmi Ibrahim, "Recreational Preference and Personality," Research Quarterly 40: 77.



related activity; travel; education; sports; and entertainment."<sup>3</sup> De Grazia states that for Plato and Aristotle, "politics and religion were at the heart of leisure."<sup>4</sup>

Using these resources and examining areas of leisure activities available to students at the College of St. Teresa, the six areas of leisure activities used in this study were formed.

The items in the questionnaire were arranged randomly. The categories were alphabetized. Each item in a given area was alphabetized. Their placement in the questionnaire was made using a table of random numbers. Finally, five open-ended questions were asked.

The California Psychological Inventory measures eighteen personality characteristics including: (Do) Dominance, (Cs) Capacity for Status, (Sy) Sociability, (Sp) Social Presence, (Sa) Self-Acceptance, (Wb) Sense of Well-being, (Re) Responsibility, (So) Socialization, (Sc) Self-Control, (To) Tolerance, (Gi) Good Impression, (Cm) Communality, (Ac) Achievement via Conformance, (Ai) Achievement via Independence, (Ie) Intellectual Efficiency, (Py) Psychological-mindedness, (Fx) Flexibility, (Fe) Femininity, (Table 1). This instrument, devised by Harrison Gough (published by

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<sup>3</sup>John R. Kelly, "Three Measures of Leisure Activity: A Note on the Continued Incommensurability of Oranges, Apples and Artichokes," Journal of Leisure Research 5 (Spring 1973): 58.

<sup>4</sup>Sebastian de Grazia, Of Time, Work, and Leisure (New York: The Twentieth Century Fund, 1962), p. 349.

TABLE 1  
CALIFORNIA PSYCHOLOGICAL INVENTORY SCALES  
AND PURPOSE OF EACH SCALE<sup>5</sup>

Class I

Dominance--to assess factors of leadership ability, dominance, persistence, and social initiative.

Capacity for Status--to serve as an index of an individual's capacity for status (not his actual or achieved status). The scale attempts to measure the personal qualities and attributes which underlie and lead to status.

Sociability--to identify persons of outgoing, sociable, participative temperament.

Social Presence--to assess factors such as poise, spontaneity, and self-confidence in personal and social interaction.

Self-Acceptance--to assess factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action.

Sense of Well-Being--to identify persons who minimize their worries and complaints, and who are relatively free from self-doubt and disillusionment.

Class II

Responsibility--to identify persons of conscientious, responsible, and dependable disposition and temperament.

Socialization--to indicate the degree of social maturity, integrity, and rectitude which the individual has attained.

Self-Control--to assess the degree and adequacy of self-regulation and self-control and freedom from impulsivity and self-centeredness.

Tolerance--to identify persons with permissive, accepting, and non-judgmental social beliefs and attitudes.

Good Impression--to identify persons capable of creating a favorable impression, and who are concerned about how others react to them.

Communality--to indicate the degree to which an individual's reactions and responses correspond to the model ("common") patterns established for the inventory.

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<sup>5</sup>Harrison G. Gough, California Psychological Inventory Manual (Palo Alto, California: Consulting Psychologists Press, Inc., 1969), pp. 10-11.

TABLE 1 - Continued

Class III

Achievement via Conformance--to identify those factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.

Achievement via Independence--to identify those factors of interest and motivation which facilitate achievement in any setting where autonomy and independence are positive behaviors.

Intellectual Efficiency--to indicate the degree of personal and intellectual efficiency which the individual has attained.

Class IV

Psychological-Mindedness--to measure the degree to which the individual is interested in, and responsive to, the inner needs, motives, and experiences of others.

Flexibility--to indicate the degree of flexibility and adaptability of a person's thinking and social behavior.

Femininity--to assess the masculinity or femininity of interests.

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Consulting Psychologists Press, Inc.), contains 480 items to which the subjects respond "true" or "false." The CPI purports to assess normal persons in a variety of social settings. The test is self-administered. It yields a test-retest reliability (one-year interval) median correlation of .68 for females and .65 for males.<sup>6</sup> (Table 2). In reviewing the CPI, Goldberg states:

[it is] among the very small set of personality inventories for which enough empirical research has accumulated to allow the user to evaluate the probable utility of his predictions in industrial, clinical, and educational settings.<sup>7</sup>

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<sup>6</sup>Ibid., p. 5.

<sup>7</sup>Oscar Krisen Buros, ed., The Seventh Mental Measurements Yearbook (Highland Park, New Jersey: The Gryphon Press, 1972), p. 50.

TABLE 2  
TEST-RETEST CORRELATIONS<sup>8</sup>

Scale	High School Females (N=125)	High School Males (N=101)	Prison Males (N=200)
Do	.72	.64	.80
Cs	.68	.62	.80
Sy	.71	.68	.84
Sp	.63	.60	.80
Sa	.71	.67	.71
Wb	.72	.71	.75
Re	.73	.65	.85
So	.69	.65	.80
Sc	.68	.75	.86
To	.61	.71	.87
Gi	.68	.69	.81
Cm	.44	.38	.58
Ac	.73	.60	.79
Ai	.57	.63	.71
Ie	.77	.74	.80
Py	.49	.48	.53
Fx	.67	.60	.49
Fe	.65	.59	.73

<sup>8</sup>Gough, California Psychological Inventory Manual, p. 19.

Research on the validity of the CPI was conducted by cross-validated studies. The CPI scales were validated by staff ratings which were correlated with scores obtained on the CPI or by correlation of the CPI scores with other selected tests administered to the subjects.<sup>9</sup>

### SELECTION OF THE SUBJECTS

The College of Saint Teresa is a four-year, Catholic institution of higher learning for women. The main campus is located in Winona, Minnesota, although the Junior and Senior student nurses reside in Rochester, Minnesota, approximately 50 miles west of Winona.

Subjects for the study were randomly selected from the resident population of 252 Sophomores, 120 Juniors, and 73 Seniors at the College in Winona. CST nursing students in residence at St. Marys Hospital in Rochester also were randomly chosen and included 87 Juniors and 38 Seniors.

Fifty students were chosen from each of three classes: Sophomores, Juniors and Seniors. Freshmen were not used in the study because of their limited opportunity to examine possible leisure activities during the first month of the academic year. Since all Freshmen and Sophomores are students in Winona, the total number of Sophomore subjects were chosen from that campus. Fifty subjects were chosen propor-

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<sup>9</sup>Ibid., p. 20.

tionately from 120 resident Juniors in Winona and 87 resident Juniors in Rochester: 28 Winona Juniors and 22 Rochester Juniors. Subjects from the Senior class, also chosen proportionately from 73 Winona resident students and 38 Rochester resident students, included 33 Winona Seniors and 17 Rochester Seniors.

The Student Personnel Staff chosen to take part in the study comprised members in the area of Student Affairs, as well as other members of the College community who worked with students in a Student Personnel capacity. Positions of the twenty-seven subjects include: Vice President for Student Affairs, Dean of Students, Assistant Dean of Students, Assistant to the Dean of Students, Members of the Residence Hall Staff, Director of Admissions, Director of Alumnae Affairs, Director of Career Planning and Placement, Director of Counseling, Director of Health, Intercollegiate Athletic Director, two members of the Pastoral Team, Director of Public Information, Registrar, and Switchboard Coordinator.

#### COLLECTION OF THE DATA

After devising the leisure questionnaire, a pilot study was executed by distributing the leisure activity questionnaire on selected residence hall corridors on campus to 161 students (54 Freshmen and 107 Upperclassmen) and ten Student Personnel Workers. Upon completion of the question-

naires, the students returned them to their Resident Assistants who in turn gave them to the Assistant to the Dean of Students. The SPW staff returned their questionnaires directly to the investigator. The pilot study was completed during the second week in May, 1974. Results were tallied by hand and refinement of the questionnaires was completed as described in a prior section of Chapter III.

During the first weeks of the academic year 1974-75, lists of all students were secured from the Office of the Registrar. Room lists were requested from the Housing Secretary. Those of CST resident nursing students were obtained from the Assistant Director of Residence at Marian Hall, St. Marys Hospital. Subjects were selected randomly from resident Sophomores, Juniors and Seniors (ut supra).

Notification concerning participation in the study was placed in the College Newsletter prior to student contact. Individual contact was made with each of the 150 subjects. Each subject understood that she had been randomly selected to participate in this study, that it would require approximately two hours to complete the two instruments, and that the study concerned the use of leisure by college women. After expressing her willingness to participate, the subject was asked to state a time during the following week which was convenient for her to take part in the study. At the stated time, the investigator brought the packet of materials to the subject's residence hall room. The subject was given

three hours to complete the instruments. At the end of that period, the packet was collected.

Student subjects in Winona were contacted during the first week in October, 1974, and completed the instruments during the second week in October, 1974. Rochester subjects were contacted during the third week in October and completed the instruments during the third and fourth weeks. Envelopes given to each subject contained the Leisure Activity Survey, the California Psychological Inventory, an answer sheet for the CPI and a soft lead pencil. A cover letter to the student, with instructions for completing the instruments, was printed on the first page of the LAS (Appendix C, page 139).

Twenty-four persons working in Student Personnel capacities on the Winona campus and three staff members in Rochester received the LAS with an accompanying cover letter. The cover letter for the staff contained instructions pertinent to them and was contained on page one of their LAS (Appendix D, page 147). The Surveys were delivered personally to each subject's residence or office, both in Winona and Rochester.

The Winona Surveys were to be returned within a week through intra-campus mail. The investigator collected the Rochester Surveys upon their completion.



## ANALYSIS OF THE DATA

Three multivariate statistical procedures were used to analyze the hypotheses. These were canonical correlation, multivariate analysis of variance, and multiple correlation.

Canonical correlation was used to test the relationship between two sets of variables, 18 personality characteristics and six areas of leisure activities. The technique, developed by Hotelling, measures the interrelations between two sets of data and provides information about the maximum correlation between linear functions of the two sets of variables. It is possible that several linear combinations may be obtained from the two sets of variables. Each pair of functions maximizes the correlation between the new pair of variates. These new canonical variates are independent of the previously derived combinations.

In canonical correlation, multiple criteria, (q), and multiple predictors, (p), are involved. Each pair of canonical variates are maximally correlated. The matrix of intercorrelations, (R), for the variables is divided into four submatrices:

- $R_{11}$  = intercorrelations among predictors.
- $R_{22}$  = intercorrelations among criteria.
- $R_{12}$  = intercorrelations of predictors with criteria.
- $R_{21}$  = intercorrelations of criteria with predictors.

The canonical equation follows:

$$(R_{22}^{-1} R_{21} R_{11}^{-1} R_{12} - \lambda_i I) b_i = 0.$$

Latent roots,  $\lambda$ , are involved in the solution,

$$|R_{22}^{-1}R_{21}R_{11}^{-1}R_{12} - \lambda I| = 0.$$

The vector of coefficients ( $b_i$ ) is the characteristic vector associated with  $\lambda_i$ . The equation for vector  $a_i$  follows:

$$a_i = \frac{(R_{11}^{-1}R_{12}b_i)}{\sqrt{\lambda_i}}$$

The  $a_i$  and  $b_i$  vectors are applied to the standard score vectors to obtain the canonical variates. The largest latent root is the square of the maximum possible correlation between the linear combinations of the two sets of measurements.<sup>10</sup>

To test the significance of the canonical correlations, Bartlett's procedures were used. Lambda is defined:

$$\Lambda = \prod_{i=1}^q (1 - \lambda_i), \quad q < p.$$

A test for the null hypothesis that predictor variates are unrelated to criteria variates is made using the  $\chi^2$  approximation for the distribution of lambda ( $\Lambda$ ). The following equation is used:

$$\chi^2 = -[N - .5(p+q+1)] \log_e \Lambda$$

with  $pq$  degrees of freedom.

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<sup>10</sup> William W. Cooley and Paul R. Lohnes, Multivariate Procedures for the Behavioral Sciences (New York: John Wiley and Sons, Inc., 1962), pp. 35-37.

If the null hypothesis is rejected, the significance of the  $q - 1$  roots are tested using:

$$\Lambda' = \prod_{i=2}^q (1 - \lambda_i)$$

$$\chi^2 = - [N - .5 (p+q+1)] \log_e \Lambda'$$

with  $(p - 1) (q - 1)$  degrees of freedom.<sup>11</sup>

A multivariate analysis of variance (MANOVA) procedure was used to test the relationship of the self-reported preferences of leisure activities in college women and preferences attributed to them by Student Personnel Staff. The MANOVA tests significant differences among groups in a multidimensional criterion space. Each of the two groups, college women and SPW staff has a six dimensional score representing the six areas of leisure. MANOVA tests two hypotheses: the homogeneity of dispersions, and the equality of the population centroids. The first null hypothesis, ( $H_1$ ), asserts that the scores of the group have equal dispersions. Following evidence for equal dispersion, ( $H_1$ ), the second hypothesis, ( $H_2$ ), may be tested which asserts the equality of group centroids. Upon rejections of  $H_2$ , differences for subscales may be investigated.<sup>12</sup>

Multiple correlation analysis, or multiple regression analysis, was used to test the third hypothesis of the study. It "provides an analysis of the relations among a

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<sup>11</sup>Ibid., p. 37.

<sup>12</sup>Ibid., pp. 60-71.

single criterion measure and two or more predictor measures."<sup>13</sup> The classes of personality characteristics are the predictors of each criterion, a leisure activity area. The program was run once for each leisure activity area.

The formula for the regressed deviation scores is:

$$\hat{x}_{mi} = b_1x_{1i} + b_2x_{2i} + b_3x_{3i} + \dots + b_{m-1}x_{(m-1)i}.$$

"The b coefficients are derived from the corresponding beta weights by scaling each beta weight by the ratio of the standard deviation of the criteria to the standard deviation of the predictor."<sup>14</sup>

The regressed raw scores formula follows:

$$\hat{X}_{mi} = b_1X_{1i} + b_2X_{2i} + b_3X_{3i} + \dots + b_{m-1}X_{(m-1)i} + C.$$

C is the intercept constant using the means of the m variables.

The equation which minimizes the average squared error of prediction,  $(e_i)$ , is:

$$f(e) = \frac{1}{N} \sum_i [z_{mi} - (\beta_1 z_{1i} + \beta_2 z_{2i} + \dots + \beta_{m-1} z_{(m-1)i})]^2.$$

The problem is then transposed into matrix notation. All intercorrelations among m variables form an m-square symmetric matrix which is called R. Matrix R is partitioned

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<sup>13</sup>Ibid., p. 31.

<sup>14</sup>Ibid., p. 32.

into submatrices

$$\begin{bmatrix} R_{11} & R_{12} \\ R_{21} & R_{22} \end{bmatrix}.$$

The required ( $\beta$ ) beta weights is computed

$$\beta = R_{21} \cdot R_{11}^{-1}$$

where  $R_{11}^{-1}$  is the inverse of  $R_{11}$ .

Coefficients for the deviation score regression equation are obtained by computing the equation:

$$b = A \cdot \beta.$$

The intercept constant,  $C$ , for the raw-score regression is:

$$C = M_m - (b \cdot M)$$

$M$  is the  $m-1$  vector of the predictor means, and  $M_m$  is the criterion variable mean.  $R$  is computed by:

$$R^2 = \beta \cdot R_{12} = \sum_i \beta_i r_{mi}.$$

The significance of  $R^2$  is tested by the analysis of variance:

$$F_{N-m-2}^{m-1} = \frac{R^2 (N - m - 2)}{(1 - R^2) (m - 1)}$$

The standard error of estimate for  $\hat{z}_m$  is given by  $\sqrt{1 - R^2}$  and for  $\hat{x}_{mi}$  and  $\hat{y}_{mi}$  by  $s_m \sqrt{1 - R^2}$ .<sup>15</sup>

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<sup>15</sup>Ibid., pp. 31-35.

## CHAPTER IV

### RESULTS AND DISCUSSION

The main objective of this study was to ascertain whether a significant relationship existed between the variables of personality as measured by the California Psychological Inventory (CPI) and the six areas of leisure activities derived from the Leisure Activity Survey (LAS). Those variables which contributed most to the significance of the results were identified and the extent to which the areas of leisure activities can be predicted from the results of selected personality variables was examined.

An investigation was made of the relationship between subjects' self-reported preferences of leisure and preferences attributed to these subjects by Student Personnel Staff.

Finally, the relationship between the classes of personality characteristics in college women as measured by the CPI and the kinds of leisure activities in which they engaged was examined. The resulting data are presented, analyzed and interpreted in relationship to these objectives.

#### RESULTS AND DISCUSSION: HYPOTHESIS I

Hypothesis 1: There is no significant relationship between the 18 personality scales of the California Psychological Inventory and the six areas of leisure use in

the Leisure Activity Survey.

The hypothesis was tested using the canonical correlation program in the University of Chicago Statistical Package for Social Sciences (SPSS). As the data in Table 3 indicate, three of the canonical correlations are statistically significant. The null hypothesis which states that there is no significant relationship between the CPI personality variables and selected leisure activities is rejected. Further, Cooley and Lohnes state that "as a rule of thumb, the authors frequently treat canonical correlations of .30 or less as trivial."<sup>1</sup> Any canonical correlation above .30 then may be said to have practical significance, even though it is not statistically significant. As indicated in Table 3, two additional canonical correlations have practical value.

The first canonical variate set has a canonical correlation of .66, a  $\chi^2$  of 223.63 with 108 d.f. and is highly significant at the .05 level of confidence. The second canonical variate set has a slightly lower canonical correlation of .54, a  $\chi^2$  of 143.69 with 85 d.f., and is also highly significant at the .05 level. Finally, the third canonical variate set with a canonical correlation of .50, a  $\chi^2$  of 96.04 with 64 d.f., is also statistically significant at the .05 level.

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<sup>1</sup>William W. Cooley and Paul R. Lohnes, Multivariate Data Analysis (New York: John Wiley and Sons, 1971), p. 176.

TABLE 3  
CANONICAL VARIATE SETS

Number of Canonical Variate Sets	Corresponding Canonical Correlation	Wilk's Lambda	Chi-Square	Degrees of Freedom
1	.66*	.20	223.63*	108
2	.54*	.35	143.69*	85
3	.50*	.50	96.04*	64
4	.43**	.66	56.86**	45
5	.37**	.81	28.31**	28
6	.24	.94	8.15	13

\*Significant at .05 level

\*\*Practical significance



The fourth and fifth canonical variate sets have corresponding canonical correlations of .43 and .37 respectively. Since these correlations are well above the .30 (ut supra), they may be considered to have practical statistical use.

Canonical correlations are derived from the coefficients which yield canonical variate sets of the original variables (described in Table 1). The number of significant canonical variate sets may be regarded as indicating the number of independent ways in which leisure activity is related to personality. In this case, three statistically significant canonical correlations indicate that there are three independent ways in which leisure activity may be said to be related to personality. Each canonical variate set has correlation significantly greater than zero with at least one personality variable and one leisure activity area variable.

Principal loadings for the three statistically significant canonical variate sets and for the two canonical variate sets with practical significance are presented in Table 4 using correlation coefficients of greater than .30. The first canonical variate (CANVAR 1) clusters negatively around CPI 4 (Social Presence) and around CPI 16 (Psychological-mindedness). Positive clusters occur at CPI 1 (Dominance), CPI 2 (Capacity for Status), and CPI 11 (Good Impression). For purposes of interpretation, this set will

TABLE 4  
PRINCIPAL LOADINGS OF CANONICAL COEFFICIENTS FOR INDEPENDENT VARIABLES

	CANVAR 1	CANVAR 2	CANVAR 3	CANVAR 4	CANVAR 5
CPI 1	.42	.63		-.43	
CPI 2	.37				
CPI 3			.31	1.05	-.85
CPI 4	-.88	.71	.62		.59
CPI 5		-.45			.34
CPI 6				1.38	
CPI 7					
CPI 8			.49		
CPI 9			1.15	-.43	.31
CPI 10		.32	-.37	-.31	.43
CPI 11	.52		-.79		
CPI 12					
CPI 13			-.53		-.40

TABLE 4 - Continued

	CANVAR 1	CANVAR 2	CANVAR 3	CANVAR 4	CANVAR 5
CPI 14		-.63	-.37	.46	
CPI 15				-.54	.50
CPI 16	-.31	-.31	-.57		
CPI 17					-.35
CPI 18			.40		

$r \geq .30$ ; significantly different from zero at the .05 level

be called Conforming--Achieving. The second canonical variate (CANVAR 2) contains its highest loadings in a positive CPI 1 (Dominance), CPI 4 (Social Presence), and CPI 10 (Tolerance). The highest negative loadings are CPI 5 (Self-acceptance), CPI 14 (Achievement via Independence), and CPI 16 (Psychological-mindedness). CANVAR 2 will be called Self-reliant--Introspective. CANVAR 3, the third canonical variate which is statistically significant, contains primary positive loadings in CPI 3 (Sociability), CPI 4 (Social Presence), CPI 8 (Socialization), CPI 9 (Self-control), and CPI 18 (Femininity). Primary negative loadings are clustered around CPI 10 (Tolerance), CPI 11 (Good Impression), CPI 13 (Achievement via Conformance), CPI 14 (Achievement via Independence), and CPI 16 (Psychological-mindedness). The third canonical variate will be known as Persevering--compliant--low achievement drive.

CANVAR 4 and CANVAR 5, while not statistically significant, will be discussed because of their practical significance.<sup>2</sup> Principal positive loadings for CANVAR 4 are CPI 3 (Sociability), CPI 6 (Sense of Well-being), and CPI 14 (Achievement via Independence). Principal negative loadings are CPI 1 (Dominance), CPI 9 (Self-control), CPI 10 (Tolerance), and CPI 15 (Intellectual Efficiency).

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<sup>2</sup>Ibid.

This canonical variate will be called Extroverted--Competitive. CANVAR 5 clusters positively around CPI 4 (Social Presence), CPI 5 (Self-acceptance), CPI 9 (Self-control), CPI 10 (Tolerance), and CPI 15 (Intellectual Efficiency). The fifth canonical variate clusters negatively around CPI 3 (Sociability), CPI 13 (Achievement via Conformance), and CPI 17 (Flexibility). CANVAR 5 will be called Detached--Poised.

Canonical coefficients for the dependent variables are presented in Table 5. These canonical coefficients relate the dependent variables to the canonical variate sets (CANVAR) which are determined by the canonical coefficients for the independent variables. Statistically significant canonical variates are CANVAR 1 (Conforming--Achieving), CANVAR 2 (Self-reliant--Introspective), and CANVAR 3 (Persevering--compliant--low achievement drive). Those canonical variates with practical significance are CANVAR 4 (Extroverted--Competitive) and CANVAR 5 (Detached--Poised). The six dependent variables, the areas of leisure activity, are defined by the items in Appendix E, page 155.

The two principal canonical variates relating to the first dependent variable, LAS 1, are CANVAR 3 and CANVAR 5; both have negative loadings. The area of leisure represented by LAS 1 is the Creative-Aesthetic area. From the data, it may be inferred that subjects who participate in leisure activities which are of a creative or aesthetic

TABLE 5  
PRINCIPAL LOADINGS OF CANONICAL COEFFICIENTS FOR DEPENDENT VARIABLES

	CANVAR 1	CANVAR 2	CANVAR 3	CANVAR 4	CANVAR 5
LAS 1			-.69		-.53
LAS 2	-.71	.52	1.04		-1.07
LAS 3		1.00	-.60	-.53	
LAS 4	-.38		-.52	.98	.76
LAS 5	.53		.85		.79
LAS 6	1.33	-1.00			

$r \geq .30$ ; significantly different from zero at the .05 level

nature are low in perseverance and compliance, but have a need to achieve. They are not detached and are not possessed of great poise. One who engages in aesthetic and creative leisure activities then may be seen as a free person who has a need to achieve or create, that is, one who is involved in life.

LAS 2, the second dependent variable, has four related canonical variates. The leisure activity area represented by LAS 2 is the Entertainment-Relaxation area. The positively related canonical variates include CANVAR 2 and CANVAR 3; the negatively related canonical variates are CANVAR 1 and CANVAR 5. It is of interest that each of the three statistically significant canonical variates is represented as well as one of the practically significant ones. The subjects who engage in leisure activities which are of an entertaining and relaxing nature include those who are self-reliant, introspective, persevering, compliant, and non-achieving. Subjects who are non-conforming and non-achieving and those who are not detached and poised are also included.

The third dependent variable, LAS 3, represents subjects who engage in intellectual leisure activities. LAS 3 is positively related to CANVAR 2 and negatively related to CANVAR 3 and CANVAR 4. These subjects may be said to be self-reliant and introspective. They have a need to achieve but they are not persevering or compliant, nor are

they extroverted or competitive.

LAS 4, representing the physical leisure activity area, is the fourth dependent variable. It is positively related to both CANVAR 4 and CANVAR 5, the canonical variates having practical significance. LAS 4 is negatively related to CANVAR 1 and CANVAR 3 which are canonical variates having statistical significance. Subjects who engage in physical leisure activities may be seen as extroverted and competitive, somewhat detached and poised. They may also be somewhat non-conforming, non-persevering and non-compliant. Because both achieving and non-achieving occur, subjects may possess either quality.

The fifth dependent variable, LAS 5, includes leisure activities of a political or social nature. CANVAR 1, CANVAR 3 and CANVAR 5 are each positively related to LAS 5. Subjects engaging in political and social leisure activities may be seen as conforming, persevering, compliant, detached, and poised. Since achieving and non-achieving occur, subjects may possess either quality, making interpretation about that quality irrelevant.

The final leisure activity area, LAS 6, contains religious (reflective and service) leisure activities. This dependent variable is related positively to CANVAR 1 and negatively to CANVAR 2.. Religious (reflective and service) leisure activities seem to be engaged in by subjects who are conforming and achieving and who are neither self-



reliant nor introspective.

Table 6 contains intercorrelation coefficients of the personality variables. Intercorrelation coefficients of leisure activity variables are presented in Table 7. It may be noted that each of the areas of leisure activity is correlated significantly at the .05 level with every other leisure activity area. It may be possible to account for this strong intercorrelation by assuming that there is a predisposition to all types of leisure in subjects who engage in any such activities. That is, subjects who engage in one type of leisure activity generally engage in more than one kind of activity.

Intercorrelation coefficients of personality and leisure activity variables are presented in Table 8. Statistically significant intercorrelation coefficients at the .05 level were found to exist in 34 instances.

## RESULTS AND DISCUSSION: HYPOTHESIS II

Hypothesis 2: There is no significant difference in self-reported preferences of leisure activities in college women and preferences attributed to them by Student Personnel Staff.

The MANOVA program from Loyola University of Chicago was used to test the second hypothesis. Multivariate Analysis of Variance is used to compare two groups. College women's self reported preferences of leisure activities were compared with leisure activities attributed

TABLE 6

## INTERCORRELATION COEFFICIENTS OF PERSONALITY (CPI) VARIABLES

	CPI 1	CPI 2	CPI 3	CPI 4	CPI 5	CPI 6	CPI 7	CPI 8	CPI 9
CPI 1	1.00*								
CPI 2	.57*	1.00*							
CPI 3	.62*	.67*	1.00*						
CPI 4	.51*	.64*	.69*	1.00*					
CPI 5	.61*	.52*	.63*	.60*	1.00*				
CPI 6	.36*	.61*	.44*	.39*	.19*	1.00*			
CPI 7	.46*	.39*	.28*	.11	.17*	.55*	1.00*		
CPI 8	-.01	.09	.03	-.11	-.05	.43*	.41*	1.00*	
CPI 9	.02	.24*	.07	-.10	-.20*	.66*	.44*	.46*	1.00*

TABLE 6 - Continued

	CPI 1	CPI 2	CPI 3	CPI 4	CPI 5	CPI 6	CPI 7	CPI 8	CPI 9
CPI 10	.33*	.67*	.42*	.45*	.24*	.79*	.56*	.30*	.55*
CPI 11	.21*	.41*	.31*	.17*	-.07	.63*	.35*	.23*	.78*
CPI 12	.20*	.08	.14	.15*	.21*	.10	.14	.32*	-.17*
CPI 13	.40*	.55*	.47*	.28*	.21*	.71*	.50*	.51*	.63*
CPI 14	.25*	.52*	.31*	.40*	.21*	.63*	.47*	.18*	.47*
CPI 15	.46*	.68*	.52*	.52*	.30*	.77*	.56*	.26*	.47*
CPI 16	.40*	.46*	.33*	.46*	.26*	.51*	.40*	.05	.38*
CPI 17	.09	.41*	.15*	.41*	.17*	.33*	.10	-.14	.11
CPI 18	-.12	-.23*	-.12	-.30*	-.02	.02	.12	.23*	.09

TABLE 6 - Continued

	CPI 10	CPI 11	CPI 12	CPI 13	CPI 14	CPI 15	CPI 16	CPI 17	CPI 18
CPI 10	1.00*								
CPI 11	.51*	1.00*							
CPI 12	.03	-.29*	1.00*						
CPI 13	.59*	.59*	.11	1.00*					
CPI 14	.79*	.40*	-.05	.53*	1.00*				
CPI 15	.80*	.48*	.08	.67*	.71*	1.00*			
CPI 16	.60*	.41*	-.08	.40*	.57*	.64*	1.00*		
CPI 17	.49*	.17*	-.17*	.10	.54*	.40*	.43*	1.00*	
CPI 18	-.07	-.12	.14	.06	.01	-.16*	-.13	-.16*	1.00*

\*  $r \geq .15$ ; significantly different from zero at the .05 level

TABLE 7  
INTERCORRELATION COEFFICIENTS OF LEISURE ACTIVITY (LAS) VARIABLES

	LAS 1	LAS 2	LAS 3	LAS 4	LAS 5	LAS 6
LAS 1	1.00*					
LAS 2	.75*	1.00*				
LAS 3	.67*	.54*	1.00*			
LAS 4	.59*	.70*	.41*	1.00*		
LAS 5	.60*	.63*	.60*	.51*	1.00*	
LAS 6	.77*	.74*	.66*	.58*	.59*	1.00*

\*  $r \geq .15$ ; significantly different from zero at the .05 level

TABLE 8  
INTERCORRELATION COEFFICIENTS OF PERSONALITY (CPI)  
AND LEISURE ACTIVITY (LAS ) VARIABLES

	CPI 1	CPI 2	CPI 3	CPI 4	CPI 5	CPI 6	CPI 7	CPI 8	CPI 9
LAS 1	.23*	.16*	.30*	.09	.09	.06	.05	-.14	-.04
LAS 2	.17*	.09	.30*	.11	.03	.06	.03	-.03	-.06
LAS 3	.40*	.26*	.32*	.19*	.13	.07	.14	-.15*	-.02
LAS 4	.13	.19*	.32*	.24*	.09	.23*	.03	-.04	.03
LAS 5	.36*	.27*	.35*	.14	.15*	.23*	.27*	.10	.13
LAS 6	.24*	.21*	.29*	-.03	.03	.14	.17*	.04	.13

TABLE 8 - Continued

	CPI 10	CPI 11	CPI 12	CPI 13	CPI 14	CPI 15	CPI 16	CPI 17	CPI 18
LAS 1	.00	.14	-.08	.10	-.07	.04	-.05	-.07	-.16*
LAS 2	-.05	.06	.00	.03	-.11	-.02	-.11	-.05	-.04
LAS 3	.08	.22*	-.08	.12	-.02	.14	.06	.00	-.25*
LAS 4	.14	.17*	-.07	.11	.11	.15*	.09	.05	-.08
LAS 5	.14	.22*	.00	.22*	.01	.18*	-.04	-.06	-.03
LAS 6	.05	.29*	-.14	.22*	.02	.08	-.03	-.05	-.09

\*  $r \geq .15$ ; significantly different from zero at the .05 level

to the subjects by the Student Personnel Staff.

Table 9 contains information concerning the multivariate tests of significance. It may be seen that five of the six F-ratios are highly significant. Thus, the over-all hypothesis which states that there is no significant difference in self-reported preferences of leisure activities in college women and preferences attributed to them by Student Personnel Staff is rejected.

This information indicates that the Student Personnel Staff does not generally know the self-reported leisure activity preferences of the college women used in this study. Differences may be accounted for by a lack of understanding on the part of the Student Personnel Staff concerning the leisure activities in which the students do take part, or by the possibility that the perceptions of the Student Personnel Staff are accurate but the self-reported preferences err. That is, students think that they engage in certain activities to the extent which they indicate, but in reality they engage in these activities to a greater extent than they report.

It is interesting to note that the leisure activity area which did not prove statistically significant was IAS 3, the intellectual area. Knowledge of the student involvement in leisure activities in the intellectual area is possessed by the staff, possibly because of its heavy academic weighting with persons who are or have been engaged



TABLE 9  
DATA ON MULTIVARIATE TESTS OF SIGNIFICANCE USING WILK'S LAMBDA CRITERION

Variable	F-Ratio	Mean Square	P Less Than
LAS 1	27.46*	2.92	0.001
LAS 2	53.67*	8.56	0.001
LAS 3	1.24	.19	0.268
LAS 4	27.62*	5.36	0.001
LAS 5	19.47*	3.33	0.001
LAS 6	9.51*	1.82	0.002

\*F-Ratios significant at the .05 level

in teaching. The Student Personnel Staff includes ten persons, eight of whom are presently teaching and two of whom were formerly on the college faculty. Lack of significant difference, on the other hand, may be accounted for by the fact that students feel freer to engage in and report leisure activities in the intellectual area than in other areas.

The question may arise concerning division of the college women into their respective classes when judging their leisure activities. Because the subjects are not divided according to classes in residence, the Student Personnel Staff is unable to perceive students in this manner, and accordingly, would be incapable of judging leisure activities.

Presentation of the means and standard deviations of the two groups is made in Table 10. In each case, the mean score for the staff is greater than the students' mean score, indicating that the staff believes the students engage in more leisure activities than they personally indicate. In particular, the staff estimates that the extent to which the students engage in entertainment-relaxation, creative-aesthetic, physical, and political-social leisure activities is much greater than the students' own report of their participation in such activities.

The .33 within cells correlation for LAS 1, creative-aesthetic leisure activities, is the only area which is not

TABLE 10  
LAS MEANS AND STANDARD DEVIATIONS  
OF COLLEGE WOMEN SUBJECTS AND STUDENT PERSONNEL STAFF

	<u>Subjects</u>		<u>Staff</u>	
	Mean	Standard Deviation	Mean	Standard Deviation
LAS 1	1.56	.34	1.92	.23
LAS 2	1.96	.42	2.57	.23
LAS 3	1.69	.40	1.78	.30
LAS 4	1.66	.46	2.14	.33
LAS 5	1.50	.43	1.89	.29
LAS 6	1.85	.46	2.13	.26

significantly different from zero at the .05 level. The data provides evidence that the Student Personnel Staff believes that subjects were engaged in creative-aesthetic leisure activities different from the students' self-reported activities.

Within cells correlations of the leisure activity scales, with significant results indicated, are presented in Table 11. The strong intercorrelation may be accounted for by the assumption, as indicated in Table 7, that there is a predisposition in the subjects toward more than one type of leisure activity. It indicates also that the Student Personnel Staff understood that predisposition when indicating leisure activities in which they believed students participated.

#### RESULTS AND DISCUSSION: HYPOTHESIS III

Hypothesis 3: There is no significant relationship between the classes of personality characteristics of college women, as determined by the CPI, and the kinds of leisure activities in which they engage.

Hypothesis three was tested using the Multiple Linear Regression program from the College of St. Teresa. This program used several predictors, the four classes of CPI scores, to predict one criterion, one area of leisure activity. Six runs were made, one for each area of leisure. From the data used, no significant relationship was found between the classes of personality characteristics of

TABLE 11  
WITHIN CELLS CORRELATIONS OF LEISURE ACTIVITY SCALES

	LAS 1	LAS 2	LAS 3	LAS 4	LAS 5	LAS 6
LAS 1	.33					
LAS 2	.74*	.40*				
LAS 3	.65*	.54*	.39*			
LAS 4	.60*	.70*	.41*	.44*		
LAS 5	.59*	.62*	.61*	.50*	.41*	
LAS 6	.76*	.73*	.65*	.58*	.59*	.44*

\* $r \geq .39$ ; significantly different from zero at the .05 level

college women, as measured by the CPI, and the kinds of leisure activities in which they engage (Table 12). The null hypothesis was accepted.

Since no relationship was found when leisure activity scores were correlated with CPI classes, the decision was made to test all leisure activity areas and all CPI classes with all other leisure activity areas and CPI classes using the University of Chicago SPSS program for Multiple Regression. Again, there was no significant relationship between the classes of personality characteristics in college women and the kinds of leisure activities in which they engage (Table 13).

Because of the significant lack of fit in every case tested, "the assumed linear model inadequately describes the data."<sup>3</sup> The lack of fit may be accounted for by the explanation in the CPI test manual which states:

The scales are grouped for convenience into four broad categories, bringing together scales having similar implications. The underlying logic here is interpretational, not statistical; no claims are advanced that these four categories constitute psychometric factors.<sup>4</sup>

Since the scales having similar implications were grouped together, it would seem that they may have had some statistical relationship; such is not the case. It was found that

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<sup>3</sup>Bernard Ostle, Statistics in Research (Ames, Iowa: Iowa State University Press, 1963), p. 190.

<sup>4</sup>Harrison G. Gough, California Psychological Inventory Manual (Palo Alto, Cal.: Consulting Psychologists Press, 1969), p. 5.

TABLE 12  
RESULTS OF TESTS FOR GOODNESS OF FIT

Criterion	Goodness of Fit F-ratios
LAS 1	$F(4,145) = 531.37^*$
LAS 2	$F(4,145) = 171.49^*$
LAS 3	$F(4,145) = 894.37^*$
LAS 4	$F(4,145) = 604.82^*$
LAS 5	$F(4,145) = 51.03^*$
LAS 6	$F(4,145) = 1026.01^*$

\*Significant lack of Fit at the .05 level

TABLE 13

## MULTIPLE REGRESSION, 6 LAS SCALES AND 4 CPI CLASSES

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
LAS 1	LAS 6	.27	38.48*
	LAS 2	.21	
	LAS 3	.17	
	CPIC 2	.00	
	LAS 4	.06	
	LAS 5	.06	
	CPIC 3	.00	
	CPIC 4	.00	
	CPIC 1	.00	



TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
LAS 2	LAS 1	.30	43.52*
	LAS 4	.27	
	LAS 6	.31	
	CPIC 3	.00	
	LAS 5	.20	
	LAS 3	-.09	
	CPIC 4	.00	
	CPI 1	.00	
	CPI 2	.67	

TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
LAS 3	LAS 1	.35	23.67*
	LAS 5	.26	
	LAS 6	.36	
	LAS 2	-.13	
	CPIC 2	.00	
	CPIC 1	.00	
	LAS 4	-.08	
	CPIC 4	.00	

TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
LAS 4	LAS 2	.56	17.82*
	CPIC 3	.01	
	LAS 1	.18	
	CPIC 4	.00	
	LAS 5	.09	
	CPIC 2	.00	
	LAS 3	-.12	
	LAS 6	.11	
	CPIC 1	.00	

TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
LAS 5	LAS 2	.35	19.36*
	LAS 3	.31	
	CPIC 2	.00	
	CPIC 1	.00	
	CPIC 4	.00	
	LAS 4	.08	
	CPIC 3	.00	
	LAS 1	.14	
	LAS 6	.05	

TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
LAS 6	LAS 1	.46	42.49*
	LAS 2	.38	
	CPIC 2	.01	
	LAS 3	.30	
	CPIC 1	.00	
	LAS 4	.06	
	LAS 5	-.04	
	CPIC 4	.00	
	CPIC 3	.00	

TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
CPIC 1	CPIC 3	1.10	31.86*
	LAS 5	6.46	
	LAS 3	8.94	
	LAS 6	-8.78	
	LAS 2	5.05	
	CPIC 2	.14	
	CPIC 4	.18	
	LAS 4	2.37	
	LAS 1	.98	

TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
CPIC 2	CPIC 3	1.03	28.55*
	LAS 5	8.64	
	LAS 1	-12.16	
	LAS 6	15.04	
	LAS 3	-8.07	
	LAS 4	-3.91	
	CPIC 1	.13	
	LAS 2	-4.22	
	CPIC 4	-.11	

TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
CPIC 3	CPIC 1	.26	58.40*
	CPIC 2	.26	
	CPIC 4	.37	
	LAS 2	-4.93	
	LAS 1	3.10	
	LAS 4	2.04	
	LAS 5	-1.97	
	LAS 6	.65	



TABLE 13 - Continued

Criterion	Variables in Regression Equation	Regression Coefficients	F-ratio for Goodness of Fit
CPIC 4	CPIC 3	.25	7.35*
	LAS 1	-2.82	
	LAS 4	1.00	
	LAS 5	-1.69	
	CPIC 1	.03	
	LAS 2	1.74	
	LAS 6	-1.00	
	CPIC 2	-.02	
	LAS 3	-.72	

\*Significant lack of fit at the .05 level

the classes were arbitrarily named and are not related significantly to each other. It is highly improbable that regression equations will result from classes which have been arbitrarily selected. The data indicate that the classes are in no sense predictors. They do not predict themselves nor do they predict any leisure activity scales.

### SUMMARY

Personality and leisure activity areas are related. This may be seen by examining correlations of the canonical variates derived from the data presented in this chapter. It may be noted in the multiple regression data, however, that the CPI classes which were arbitrarily grouped and named are not at all related to the leisure activity areas.

From the canonical correlation were derived three statistically significant and two practically significant and independent ways in which personality and leisure activities are related. Each canonical variate (CANVAR) was named using the data obtained from the correlations. CANVAR 1 was called conforming--achieving. CANVAR 2 was named self-reliant--introspective. Names for CANVAR 3, CANVAR 4, and CANVAR 5, were, respectively: persevering--compliant--non-achieving; extroverted--competitive; and detached--poised.

The data showed that persons engaging in creative-aesthetic leisure activities were low in perseverance and

compliance, but have a need to achieve. They are neither detached nor poised.

Persons engaging in leisure activities of an entertaining or relaxing nature tend to be self-reliant--introspective, and persevering--compliant--non-achieving. They are also non-conforming--non-achieving, and are not detached or poised.

Intellectual leisure activities are engaged in by persons who may be said to be self-reliant--introspective. They do not have a need to achieve, nor are they extroverted or competitive.

Those who take part in leisure activities of a physical nature tend to be extroverted and competitive; they are also somewhat detached and poised. The persons who take part in physical leisure activities are also non-conforming, non-persevering and non-compliant.

Leisure activities of a political-social nature are engaged in by persons who may be seen as conforming, persevering, compliant, detached, and poised. Religious (reflective and service) leisure activities are participated in by persons who are conforming and achieving, but who are neither self-reliant nor introspective.

It may be observed from the intercorrelation coefficients that the majority of CPI scores as well as the majority of LAS scores are highly intercorrelated, indicating the interrelationship of scales in both the Personality inventory and the Leisure Activity Survey. It

would seem desirable in a personality inventory such as the CPI to have some interrelationship in the scales, since the inventory purports to measure normal persons with generally integrated personalities.<sup>5</sup> The intercorrelation coefficients of the LAS may be accounted for by the likelihood that those persons participating in one kind of leisure activity are apt to participate in more than one type. The data also show that scores on the CPI and the LAS are intercorrelated, indicating the personality characteristics and the leisure activity areas are related.

Data obtained from multivariate analysis of variance showed significant differences in the Student Personnel Staff's perception of the use of leisure by students and the students' self-reported uses of leisure. These differences may occur because the staff perceives the students spending more time engaging in leisure activities than they actually do, or because students actually spend more time participating in leisure activities than they report. Regardless, the staff perceives the students engaging in leisure activities to a greater extent than the students themselves report.

The intellectual leisure activity area is the only instance in which the Student Personnel Staff and the students show no significant difference. That is, students do not differ significantly from staff in their self-

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<sup>5</sup>Ibid.

reported preferences of intellectual leisure activities and those attributed to them by the staff. This lack of significant difference in the intellectual leisure area may be accounted for by examining the heavy academic weighting of the Student Personnel Staff. Since ten of the staff are or have been on the college faculty, it would seem they have a greater knowledge of the intellectual leisure activities participated in by the students than they have of any other leisure activity area. On the other hand, the lack of significance may be attributed to the students' feeling of greater freedom to participate in and to report intellectual leisure activities.

It is of interest to note that, with but one exception, staff and students report student participation in similar leisure activities. The exception is the creative-aesthetic area in which the staff reports that students participate in creative-aesthetic activities different from the students' self-reported activities.

In completing the Leisure Activity Survey, the college women were asked to state not only leisure activities in which they currently took part, but also activities in which they wished they could participate. Since the major thrust of this study was directed toward leisure activities in which students are presently engaged, canonical correlations for the data indicative of the leisure activities in which students wish to take part is

presented in Appendix F, page 160. It may be seen in Table 14 that there are three statistically significant and two practically significant and independent ways in which personality is related to the leisure activity areas of desired participation by the college women. This finding is similar to the first hypothesis concerning leisure activities engaged in currently.

Finally, additional supplementary data, including factor analysis of each item in the Leisure Activity Survey, are presented in Appendix G, page 171.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### SUMMARY

##### Background

Despite the affirmation that use or misuse of leisure and the growth or decline of a civilization are related, research on leisure is limited. Leisure, viewed as a state of being, is the basic concept from which this study proceeds. The definition of the term 'leisure activity' as that which is performed for its own sake springs from an understanding of that basic concept.

##### Purpose of the Study

In this investigation, the relationship between personality and the use of leisure was studied to ascertain whether personality was influential in determining college women's choices of leisure activities. A comparison was also made of the college women's self-reported preferences of leisure activities and preferences attributed to them by Student Personnel Staff. Finally, an examination was made of the relationship between the classes of personality characteristics of college women and the kinds of leisure activities in which they engage.

### Research Hypotheses

1. There is no significant relationship between the 18 personality scales of the California Psychological Inventory and the six areas of leisure use in the Leisure Activity Survey.
2. There is no significant difference in self-reported preferences of leisure in college women and preferences attributed to them by Student Personnel Staff.
3. There is no relationship between the classes of personality characteristics of college women as determined by the CPI and the kinds of leisure activities in which they engage.

### Review of the Literature

The review of the literature on leisure was examined from five points. The historical background of leisure was traced from the Greek philosophy (particularly that of Aristotle, who held an all-encompassing view of leisure), to the Romans' concept which conceived of leisure (or rest) for the sake of work. The advent of Christianity saw a return of the Aristotelian idea of leisure as contemplation, the highest form of activity. Since the Renaissance, leisure was considered by many as that in which one engaged after daily work was completed. From primitive times to the present, celebrations were seen as uses of leisure.



Dimensions of leisure were investigated. These ranged from leisure as a state of being, to leisure as a specific amount of free time, either unfilled time or time filled with selected activities.

Several problems were reviewed. The most basic one dealt with a misunderstanding of the concept of leisure. Other concerns included advertising which encourages the creation of needs; the idea that free time is seen as a social problem; and the misuse of spare time. That schools are no longer places of leisure presented a problem as well.

The uses of leisure included both negative and positive aspects. Some authors viewed leisure as the epitome of freedom and as a means of inner growth for the individual, while others believed leisure is dependent on one's occupation, or that it is solely dependent on one's choices of activity. Finally, empirical studies on leisure were reviewed. Research concerning the influence of personality on the use of leisure, studies on leisure using women or college students as subjects, and leisure programs were investigated.

#### Instruments Used in the Study

Two research instruments were used in the study: the California Psychological Inventory (CPI), and the Leisure Activity Survey (LAS). The CPI is a standardized inventory

which measures 18 personality characteristics. The LAS, developed by the author, was refined through a pilot study. Categories of leisure activities were validated by seven experts. The survey listed 78 uses of leisure in which students at the College of St. Teresa could engage. Subjects were asked to indicate the extent to which they presently engaged in a leisure activity and the extent to which they wished to participate in that activity. Students were encouraged to add supplementary activities.

#### Sample Population

This study used 150 subjects chosen from the total resident upperclass women students at the College of St. Teresa. Fifty Juniors and 50 Seniors were proportionately and randomly selected from the total resident population of students at the College of St. Teresa in Winona, Minnesota, and of CST nursing students in residence in Rochester, Minnesota. Since all CST Sophomores live in Winona, Minnesota, 50 subjects were randomly selected from the total resident Sophomores there.

Student Personnel Staff chosen to take part in the study comprised all the members in the area of Student Affairs, as well as other members of the college community who worked with students in a Student Personnel capacity. Twenty-seven persons of the Student Personnel Staff were used as subjects.

### Methodology

Each subject was personally contacted and asked to take part in the study by reading the instructions found in the LAS and completing the two research instruments. The packet of material was distributed individually to each subject and collected three hours later.

Data were analyzed using multivariate statistical techniques. Canonical correlation was used to test the relationship between personality (the independent variable), and leisure activity areas (the dependent variables). Differences in subjects' self-reported uses of leisure and those attributed to them by Student Personnel Staff were tested by multivariate analysis of variance (MANOVA) procedures. Multiple correlation analysis, also known as multiple regression analysis, was used to determine significant relationships between classes of personality and leisure activity areas.

### Results of the Study

The three hypotheses concerning the use of leisure by college women were tested in an effort to attain a more comprehensive understanding of this use of leisure. The first hypothesis dealt with the relationship of personality and the use of leisure by college women. The determination was made that personality and the use of leisure were related.

Given the existence of such a relationship, the

question arises of whether the Student Personnel Staff knows the leisure activities in which students engage and the extent to which they take part in these activities. The question, when answered, gives information concerning the direction program planning must take in order to encourage the total development of the student.

If staff is unaware of student involvement in leisure, the staff must then be informed about the type and extent of this involvement. If staff is aware of the leisure activities and the extent to which students engage in such activities, education of staff may be directed toward a greater understanding of the role personality plays in the selection of leisure activities by students with certain personality characteristics. In this study, the staff was generally aware of the leisure activities engaged in by students, but staff and students differed in the extent to which each group reported student participation.

Finally, a question was asked concerning the relationship of groups or classes of personality characteristics and college women's uses of leisure. If selected personality characteristics are related to uses of leisure, are classes of personality characteristics also related? With such information, it would be possible to generalize the understanding of the relationship of personality and leisure to broader areas (classes) without diminishing knowledge obtained from testing the more specific areas.

While generalization of groups of personality characteristics and leisure activities tested in this study was not possible, other groups of personality characteristics were derived from testing the first hypothesis.

When the first hypothesis was tested, significant relationships were found to exist between personality characteristics of college women and their leisure activity choices. Thus, the first null hypothesis was rejected.

Three statistically significant and two practically significant canonical variate sets (CANVAR) were derived from the canonical correlation procedure. Canonical variate set (CANVAR) is the name given to a group of variables which exhibit some independent interrelation. It provides information concerning the maximum correlation between the two sets of variables (in this case, the personality variables and the leisure activity variables). Initially, each significant CANVAR contains positive and negative weights from each of the 18 personality characteristics. Each of these canonical variate sets is then positively or negatively correlated with each leisure activity area. Interpretation of the correlation between the personality characteristics and the leisure activity area was made using the highest correlations between the CANVARs for the personality characteristics and the leisure activity areas.

Principal loadings for the statistically significant

canonical variate sets were examined. For purposes of interpretation, these canonical variate sets were named using the information obtained from the principal positive and negative loadings. The first statistically significant CANVAR was called conforming--achieving. The second statistically significant CANVAR was named self-reliant--introspective. Persevering--compliant--low achievement drives was the name given the third statistically significant CANVAR. The fourth and fifth canonical variate sets which had practical significance were called extroverted--competitive, and detached--poised, respectively.

Six areas of leisure activity used in the study were the creative-aesthetic, entertainment-relaxation, intellectual, physical, political-social, and religious (reflective and service) areas. Canonical coefficients for these dependent variables were derived from the data. These canonical coefficients relate the dependent variables to the canonical variate sets. The first leisure activity area (LAS 1) is principally and negatively related to CANVAR 3 and CANVAR 5. From the data, it may be inferred that subjects who participate in leisure activities of a creative-aesthetic nature are low in perseverance and compliance, but have a need to achieve. They are not detached and are not possessed of great poise.

LAS 2, the entertainment-relaxation area, is positively related to CANVAR 2 and CANVAR 3; it is negatively

related to CANVAR 1 and CANVAR 5. Subjects who engage in leisure activities of an entertaining-relaxing nature may be said to be generally self-reliant, introspective, persevering, compliant and non-achieving. They are also non-conforming and are not detached or poised.

The intellectual leisure activity area, LAS 3, is positively related to CANVAR 2 and negatively related to CANVAR 3 and CANVAR 4. The inference may be made that subjects choosing intellectual leisure activities are self-reliant and introspective. They have a need to achieve but are not persevering or compliant nor are they extroverted or competitive.

LAS 4, representing the physical leisure activity area, is positively related to CANVAR 4 and CANVAR 5. LAS 4 is negatively related to CANVAR 1 and CANVAR 3. Subjects who engage in leisure activities of a physical nature may be seen as extroverted and competitive and somewhat detached and poised. They may also be considered non-conforming, non-persevering and non-compliant.

Leisure activities of a political and social nature are represented in LAS 5. CANVAR 1, CANVAR 3, and CANVAR 5 are each positively related to LAS 5. It may be inferred that subjects engaging in political and social leisure activities are conforming, persevering, compliant, detached, and poised.

The sixth dependent variable, LAS 6, contains

religious (reflective and service) leisure activities. LAS 6 is related positively to CANVAR 1 and negatively to CANVAR 2. Religious (reflective and service) leisure activities seem to be engaged in by subjects who are conforming and achieving and who are neither self-reliant nor introspective.

Because all leisure activity areas are significantly intercorrelated, it may be noted that subjects engaging in one type of leisure activity generally engage in more than one kind. Thus, the assumption may be made that those engaging in leisure activities of a similar nature have a predisposition to activities in other leisure activity areas.

The test of the second hypothesis revealed significant differences in self-reported preferences of leisure activities in college women and preferences attributed to them by Student Personnel Staff. The second null hypothesis was rejected. Data showed that the subjects and the Student Personnel Staff differed significantly in five of the six F-ratios. The F-ratio for LAS 1 (creative-aesthetic) was statistically significant. However, student and staff within cells correlation which is not significantly different from zero. This test indicated that Student Personnel Staff attributed more and different leisure activities to subjects than the students' self-reported activities indicated.



F-ratios for LAS 2 (entertainment-relaxation), LAS 4 (physical), LAS 5 (political-social), and LAS 6 (religious, reflective and service) were all statistically significant. The within cells correlation for these scores were significantly different from zero. Both students and staff chose similar leisure activities. The staff, however, indicated that students engaged in the activities to a greater extent than the students' self-reported indications.

One F-ratio was not statistically significant. This was for LAS 3 (intellectual). There was no difference in self-reported preferences of intellectual leisure activities by college women and those attributed to them by the Student Personnel Staff.

Analysis of the third hypothesis indicated that there was no significant relationship between the classes of personality characteristics proposed by the author of the CPI and the kinds of leisure activities in which college women engaged. The third null hypothesis was accepted.

In testing the relationship between classes of personality characteristics and the kinds of leisure activities in which college women engaged, multiple regression coefficients were used. Before significant results may be obtained, the test for goodness of fit is run. The goodness of fit, or F-ratio, should not exceed 2.79. In each case, the F-ratio was well above 2.79. The smallest was 51.03 and the largest was 1026.01. Hence, further testing

using these personality classes would be meaningless.

From this information it may be seen that the classes of personality characteristics given in the CPI manual were grouped arbitrarily and for convenience rather than statistically, since those classes were not composed of related characteristics. On the contrary, the classes derived from the test of the first hypothesis did produce significant groupings. For this reason, the acceptance of this hypothesis is consistent with the rejection of the first and second hypotheses.

There is an overall consistency in these results because groups of personality characteristics were obtained which would allow generalizations to be made from the specific personality characteristics tested in the first hypothesis.

The second hypothesis, dealing with differences in self-reported preferences of leisure by college women and those attributed to them by Student Personnel Staff, was tested before the classes of personality characteristics in order to obtain results whose interpretation would not be colored by the acceptance or rejection of the relationship of classes of personality and the leisure activity areas.

## CONCLUSIONS

1. Personality characteristics, as measured by the

California Psychological Inventory (CPI), are significantly related to the areas of leisure activity found in the Leisure Activity Survey (LAS).

2. With one exception, Student Personnel Staff and students agree concerning the kinds of leisure activities in which the students participate. However, the opinion of the Student Personnel Staff differs from that of the students in the extent to which they report that the students engage in these leisure activities.

3. Groupings according to personality classes, which were arbitrarily proposed by the author of the CPI, did not render significant results when related to the kinds of leisure activities in which students took part. However, canonical variate sets resulting from canonical correlations did produce statistically significant groupings.

4. It may be seen in factors resulting from analysis of the items contained in the LAS, that the number of the students' present self-reported leisure activities is greater than the number of the leisure activities in which they express the wish to participate.

#### Further Conclusions

This study not only contributes generally to the theoretical knowledge concerning the relationship of personality and the use of leisure by college women, but it adds information specifically to the field of Student

Personnel Work, as may be seen in these supplementary conclusions.

The objectives of this study have been fulfilled. Greater understanding of human behavior related to leisure was gleaned, as is evidenced in the aforementioned conclusions.

The research was based on a more encompassing definition of leisure than found in studies previously undertaken. Emphasis was placed on the concepts of leisure as a state of being, and of leisure activity as that which is performed for its own sake and not as time filled with alternative activity choices.

Valuable information concerning student life was secured. Though many opportunities for meaningful use of leisure were available, some students did not utilize these opportunities. This may be seen in the negative loadings for Factor 1 in the analysis of LAS items. It may be deduced from this evidence that some students do not possess the qualities for leisure, or that they are reticent to use leisure either because they do not wish to do so, or because they prefer to work or study. On the other hand, the data substantiated the inference that some students have a predisposition to leisure. These students reported engaging in more than one type of leisure activity.

Programs may be planned to enhance the total development of the student by considering the findings of this

study. Knowledge that personality is related to college women's use of leisure would promote adoption of programs taking into account the fact that a wide variety of personalities on a campus would dictate a wide variety of choices of leisure activities.

Programs may be initiated which aid Student Personnel Staff in acquiring a more accurate concept of students' participation in leisure activities. Also, helping students recognize the true extent of their involvement in leisure would be desirable for more meaningful engagement in these activities.

The counseling of some college women may be enhanced by a greater understanding of the importance of leisure in their lives. The significance of understanding college women's use of leisure may also be extended to students' occupational choices. With more complete information, students may be given greater assistance in obtaining occupations which they find satisfying.

Finally, this investigation provides a basis for further research. Recommendations for possible additional research follow.

#### RECOMMENDATIONS

1. In order to generalize the conclusions that choices of leisure activities are related to personality, replication of this study using other sample populations

is recommended. Such sample populations might include: college age persons who do not attend college, community college students, students attending vocational or technical post-secondary schools, university students from a wide range of academic disciplines, and women who are enrolled in continuing education programs.

2. It is important that further study be completed using the derived canonical variate sets in the investigation of the relationship of personality to one's choice of leisure activities. These canonical variate sets (CANVAR) were derived from the canonical correlation statistical procedure. Canonical variate sets provide statistically significant positive and negative loadings for areas of leisure activity; hence, more precise interpretation of the use of leisure may be possible when research is related to these new classes of personality.

3. Because the sample Student Personnel Staff which was used in this study was weighted with persons in the academic area, research using only Student Personnel Staff in the area of Student Affairs may yield results different from those obtained in this investigation. That is, a Student Personnel Staff whose sole responsibility lies in the area of Student Affairs may have a broader, more accurate concept of the extent to which students engage in leisure activity areas. Justification for this belief may be found in the fact that this sample Student Personnel

Staff did have an accurate perception of the students' self-reported intellectual leisure activities.

4. Differences occurred in students 'Do' and 'Wish' responses to the LAS. That is, student responses differed in the statements of the extent to which they actually participated in leisure activities and the extent to which they wished to engage in such activities. These differences are obvious from the number of factors derived from the Leisure Activity Survey items for 'Do' responses (26) and the number of factors derived from the LAS items for 'Wish' responses (17). Research should be undertaken to determine the cause for fewer factors for 'Wish' items. It is open to question whether these factors reflect subjects' desire to engage in fewer leisure activities, whether the greater number of factors for 'Do' items indicates that subjects engage in activities because they are influenced by peers, or whether fewer factors for 'Wish' responses indicate that students become more selective after having experienced many types of leisure activities.

5. Factor analysis of the LAS items indicates more specific areas of leisure activity than those used in this study. It also contains factors for leisure activities which are active and passive. For example, the religious (reflective and service) area would possibly be subdivided into reflective-oriented religious leisure activities and

service-oriented religious leisure activities. Such an examination of the results of this factor analysis prompts revision of the LAS. With this revised LAS, additional research could provide more meaningful leisure activity areas, and thus, more detailed information concerning the relationship between personality and leisure.



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## DISSERTATIONS

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## APPENDIX A

Dear Student,

Would you be willing to participate in a pilot study to be used in planning a research project? The project concerns college women's use of leisure.

Please check activities in which you participate and the extent to which you take part. Feel free to add other significant uses of leisure.

	None or Little	Some	Much
Participating in intramural sports	_____	_____	_____
Reading books	_____	_____	_____
Reading magazines	_____	_____	_____
Listening to music	_____	_____	_____
Attending concerts, recitals	_____	_____	_____
Visiting art exhibits	_____	_____	_____
Attending plays	_____	_____	_____
Participating in theater groups	_____	_____	_____
Involvement in student government	_____	_____	_____
Membership in Clubs (French, History, etc.)	_____	_____	_____
Visiting with friends	_____	_____	_____
Hiking	_____	_____	_____
Participating in ballet or modern dance	_____	_____	_____
Participating in music groups	_____	_____	_____
Biking	_____	_____	_____
Attending movies	_____	_____	_____
Inventing and/or using gadgets	_____	_____	_____
Contributions to literary publications	_____	_____	_____

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	None or Little	Some	Much
Participation in politics (national, state, local)	_____	_____	_____
Involvement in Ecology program	_____	_____	_____
Going on picnics	_____	_____	_____
Volunteer work at Hospice	_____	_____	_____
Planning liturgies	_____	_____	_____
Attending liturgical celebrations	_____	_____	_____
Playing cards	_____	_____	_____
Involvement in poverty program	_____	_____	_____
Dating	_____	_____	_____
Playing a musical instrument	_____	_____	_____
Skiing and/or ice skating	_____	_____	_____
Tennis and/or golf	_____	_____	_____
Knitting, macramé (similar crafts)	_____	_____	_____
Wood or metal crafts	_____	_____	_____
Sewing	_____	_____	_____
Watching television	_____	_____	_____
Playing table games	_____	_____	_____
Composing music	_____	_____	_____
Shopping	_____	_____	_____
Grooming (care of hair and clothes, etc.)	_____	_____	_____
Traveling	_____	_____	_____
Baby-sitting	_____	_____	_____

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	None or Little	Some	Much
Social dancing	_____	_____	_____
Enjoying silence and solitude	_____	_____	_____
Eating for pleasure	_____	_____	_____
Studying for pleasure	_____	_____	_____
Sunbathing	_____	_____	_____
Attendance at sports events	_____	_____	_____
Discussion groups	_____	_____	_____
Rearranging and redecorating room (etc.)	_____	_____	_____
Swimming	_____	_____	_____
Cooking	_____	_____	_____
Creative day-dreaming	_____	_____	_____
Class activities	_____	_____	_____
Committee work	_____	_____	_____
Attending lectures	_____	_____	_____
Creative writing	_____	_____	_____
Social drinking	_____	_____	_____
Camping	_____	_____	_____
Horseback riding	_____	_____	_____
Writing letters	_____	_____	_____
Drawing	_____	_____	_____
Praying	_____	_____	_____
Sketching and/or Painting	_____	_____	_____

-4-

	None or Little	Some	Much
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



## APPENDIX B

Dear Colleague,

Would you be willing to participate in a pilot study to be used in planning a research project? The project concerns college women's use of leisure.

Please check activities in which you think students participate and the extent to which you think they take part. Feel free to add other significant uses of leisure.

	None or Little	Some	Much
Participating in intramural sports	_____	_____	_____
Reading books	_____	_____	_____
Reading magazines	_____	_____	_____
Listening to music	_____	_____	_____
Attending concerts, recitals	_____	_____	_____
Visiting art exhibits	_____	_____	_____
Attending plays	_____	_____	_____
Participating in theater groups	_____	_____	_____
Involvement in student government	_____	_____	_____
Membership in Clubs (French, History, etc.)	_____	_____	_____
Visiting with friends	_____	_____	_____
Hiking	_____	_____	_____
Participating in ballet or modern dance	_____	_____	_____
Participating in music groups	_____	_____	_____
Biking	_____	_____	_____
Attending movies	_____	_____	_____
Inventing and/or using gadgets	_____	_____	_____
Contributions to literary publications	_____	_____	_____



-2-

	None or Little	Some	Much
Participation in politics (national, state, local)	_____	_____	_____
Involvement in Ecology program	_____	_____	_____
Going on picnics	_____	_____	_____
Volunteer work at Hospice	_____	_____	_____
Planning liturgies	_____	_____	_____
Attending liturgical celebrations	_____	_____	_____
Playing cards	_____	_____	_____
Involvement in poverty program	_____	_____	_____
Dating	_____	_____	_____
Playing a musical instrument	_____	_____	_____
Skiing and/or ice skating	_____	_____	_____
Tennis and/or golf	_____	_____	_____
Knitting, macramé (similar crafts)	_____	_____	_____
Wood or metal crafts	_____	_____	_____
Sewing	_____	_____	_____
Watching television	_____	_____	_____
Playing table games	_____	_____	_____
Composing music	_____	_____	_____
Shopping	_____	_____	_____
Grooming (care of hair and clothes, etc.)	_____	_____	_____
Traveling	_____	_____	_____
Baby-sitting	_____	_____	_____

-3-

	None or Little	Some	Much
Social dancing	_____	_____	_____
Enjoying silence and solitude	_____	_____	_____
Eating for pleasure	_____	_____	_____
Studying for pleasure	_____	_____	_____
Sunbathing	_____	_____	_____
Attendance at sports events	_____	_____	_____
Discussion groups	_____	_____	_____
Rearranging and redecorating room (etc.)	_____	_____	_____
Swimming	_____	_____	_____
Cooking	_____	_____	_____
Creative day-dreaming	_____	_____	_____
Class activities	_____	_____	_____
Committee work	_____	_____	_____
Attending lectures	_____	_____	_____
Creative writing	_____	_____	_____
Social drinking	_____	_____	_____
Camping	_____	_____	_____
Horseback riding	_____	_____	_____
Writing letters	_____	_____	_____
Drawing	_____	_____	_____
Praying	_____	_____	_____
Sketching and/or Painting	_____	_____	_____

-4-

	None or Little	Some	Much
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

LIBRARY

ACTIVITIES

SURVEY

APPENDIX C

# **LEISURE ACTIVITY SURVEY**

Name \_\_\_\_\_

Dear Student,

Thank you for your willingness to participate in my research project. The study concerning college women's use of leisure will aid staff in planning student life programs at Saint Teresa's.

Please place your name on the answer sheet of the California Psychological Inventory and on the Leisure Activity Survey. Your name will be used to coordinate the materials ONLY. After it has been ascertained that all materials have been collected, your name will be removed from both sets of data. Thus, confidentiality will be preserved throughout this study.

### I. Leisure Activity Survey

Please check activities in which you participate and the extent to which you take part in them. When making your judgment, please take into account an "often" response would be made to activities in which you invest time regularly during the season. An example might be skiing and/or ice skating. If you participate in these activities sometimes or often during the winter season, check the appropriate column disregarding the seasons in which you do not ski or ice skate. Also, please check activities in which you wish to participate and the extent to which you wish you could take part.

The activity should be a leisure activity for **you**. That is, it should be **engaged in for its own sake**, or simply because you **want** to do it.

### II. California Psychological Inventory

Upon completion of the Leisure Activity Survey, please read the directions and complete the California Psychological Inventory.

Return both the completed Survey and the Inventory (booklet and answer sheet) to the examiner.

Upon completion of this study, the results will be made available to you. Thank you for your cooperation.

Activity	Do Participate			Wish to Participate		
	Almost Never	Some- times	Often	Never	Some- times	Often
Inventing and/or using gadgets	_____	_____	_____	_____	_____	_____
Playing cards and/or table games	_____	_____	_____	_____	_____	_____
"Going out with the girls"	_____	_____	_____	_____	_____	_____
Attending comic movies	_____	_____	_____	_____	_____	_____
Sewing	_____	_____	_____	_____	_____	_____
Horseback riding	_____	_____	_____	_____	_____	_____
Singing informally	_____	_____	_____	_____	_____	_____
Napping	_____	_____	_____	_____	_____	_____
Organizing or participating in class activities	_____	_____	_____	_____	_____	_____
Playing tennis and/or golf (in season)	_____	_____	_____	_____	_____	_____
Camping	_____	_____	_____	_____	_____	_____
Planning liturgies or para-liturgies	_____	_____	_____	_____	_____	_____
Sailing or boating (in season)	_____	_____	_____	_____	_____	_____
Listening to semi-classical music (musicals, operettas, folk operas, etc.)	_____	_____	_____	_____	_____	_____
Roller skating	_____	_____	_____	_____	_____	_____
Watching light entertainment or daytime TV	_____	_____	_____	_____	_____	_____
Reading popular magazines	_____	_____	_____	_____	_____	_____
Writing letters	_____	_____	_____	_____	_____	_____
Creative day-dreaming	_____	_____	_____	_____	_____	_____
Praying	_____	_____	_____	_____	_____	_____
Traveling	_____	_____	_____	_____	_____	_____
Conversing with friends	_____	_____	_____	_____	_____	_____
Studying for pleasure	_____	_____	_____	_____	_____	_____
Participating in theater groups	_____	_____	_____	_____	_____	_____
Drawing, sketching and/or painting	_____	_____	_____	_____	_____	_____
Watching political news and documentaries on TV	_____	_____	_____	_____	_____	_____
Visiting art exhibits	_____	_____	_____	_____	_____	_____
Membership in clubs	_____	_____	_____	_____	_____	_____
Attendance at sports events	_____	_____	_____	_____	_____	_____
Discussing books or ideas with friends	_____	_____	_____	_____	_____	_____

Activity	Do Participate			Wish to Participate		
	Almost Never	Some- times	Often	Never	Some- times	Often
Bowling	_____	_____	_____	_____	_____	_____
Attending educational lectures	_____	_____	_____	_____	_____	_____
Shopping for clothes or furnishings	_____	_____	_____	_____	_____	_____
Participation in politics (national, state, local)	_____	_____	_____	_____	_____	_____
Enjoying silence and solitude	_____	_____	_____	_____	_____	_____
Listening to popular music (Jazz, Rock, Country-Western)	_____	_____	_____	_____	_____	_____
Hiking or walking	_____	_____	_____	_____	_____	_____
Participation in ballet or modern dance	_____	_____	_____	_____	_____	_____
Doing committee work	_____	_____	_____	_____	_____	_____
Participating in educational group discussions	_____	_____	_____	_____	_____	_____
Going on picnics (in season)	_____	_____	_____	_____	_____	_____
Working with wood and metal crafts	_____	_____	_____	_____	_____	_____
Participating in extramural or intramural sports	_____	_____	_____	_____	_____	_____
Social drinking	_____	_____	_____	_____	_____	_____
Attending concerts, recitals	_____	_____	_____	_____	_____	_____
Knitting, macrame', silkscreening (or similar crafts)	_____	_____	_____	_____	_____	_____
Reading major classics (Plato, Dante, Shakespeare, Goethe, etc.)	_____	_____	_____	_____	_____	_____
Grooming (care of hair and clothes, etc.)	_____	_____	_____	_____	_____	_____
Reading news magazines or newspapers for analyses of political events	_____	_____	_____	_____	_____	_____
Sunbathing	_____	_____	_____	_____	_____	_____
Biking	_____	_____	_____	_____	_____	_____
Social dancing	_____	_____	_____	_____	_____	_____
Enjoying nature	_____	_____	_____	_____	_____	_____
Skiing and/or ice skating (in season)	_____	_____	_____	_____	_____	_____
Listening to classical music (opera, symphony)	_____	_____	_____	_____	_____	_____
Window shopping	_____	_____	_____	_____	_____	_____
Dating	_____	_____	_____	_____	_____	_____
Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)	_____	_____	_____	_____	_____	_____



Activity	Do Participate			Wish to Participate		
	Almost Never	Some- times	Often	Never	Some- times	Often
Reading journals or literary magazines	_____	_____	_____	_____	_____	_____
Sharing experiences and feelings with friends	_____	_____	_____	_____	_____	_____
Attending plays	_____	_____	_____	_____	_____	_____
Raising plants or tending fish	_____	_____	_____	_____	_____	_____
Attending liturgical or para-liturgical celebrations	_____	_____	_____	_____	_____	_____
Rearranging and redecorating room	_____	_____	_____	_____	_____	_____
Watching educational television	_____	_____	_____	_____	_____	_____
Volunteer work with community organizations (Girl Scouts, Red Cross, Poverty Program, etc.)	_____	_____	_____	_____	_____	_____
Eating for pleasure	_____	_____	_____	_____	_____	_____
Volunteer work with individuals (aging, handicapped, youth, etc.)	_____	_____	_____	_____	_____	_____
Cooking	_____	_____	_____	_____	_____	_____
Involvement in student government on campus	_____	_____	_____	_____	_____	_____
Playing a musical instrument	_____	_____	_____	_____	_____	_____
Participating in music groups	_____	_____	_____	_____	_____	_____
Reading current popular literature (detective, science fiction, romance)	_____	_____	_____	_____	_____	_____
Swimming	_____	_____	_____	_____	_____	_____
Contributing to literary publications	_____	_____	_____	_____	_____	_____
Creative writing or composing music	_____	_____	_____	_____	_____	_____
Meditating and/or Yoga	_____	_____	_____	_____	_____	_____
Attending serious movies	_____	_____	_____	_____	_____	_____

In what type of leisure activities do you anticipate taking part after you terminate your formal education?

Do the leisure activities in which you participate differ greatly from those in which you wish to take part? Could you elaborate on how this affects your attitude toward leisure.

Does the term "leisure activity" mean anything to you which extends the idea of "what one does for its own sake?" What are some of the other meanings which the term "leisure activity" has for you.

How, as a woman, do you feel about your ability to use leisure?

In what way is leisure significant to you?

Further information concerning this Survey may be  
obtained from:

Sister Joyce Eileen Gallagher  
College of Saint Teresa  
Winona, Minnesota 55987

## APPENDIX D

# **LEISURE ACTIVITY SURVEY**

Name \_\_\_\_\_

Dear Colleague,

In completing the Leisure Activity Survey, please check activities in which you think students participate and the extent to which you think they take part. When making your judgment, please take into account an "often" response would be made to activities in which the students invest time regularly during the season. An example might be skiing and/or ice skating. If you believe the students participate in these activities sometimes or often during the winter season, check the appropriate column, disregarding the seasons in which they do not ski or ice skate.

The activity should be a leisure activity. It should be **engaged in for its own sake**, or simply because you believe the students **want** to do it. Obligation or reward should be no criterion for choice.

Thank you for your cooperation.

Activity	Do Participate			Wish to Participate		
	Almost Never	Some- times	Often	Never	Some- times	Often
Inventing and/or using gadgets	_____	_____	_____	_____	_____	_____
Playing cards and/or table games	_____	_____	_____	_____	_____	_____
"Going out with the girls"	_____	_____	_____	_____	_____	_____
Attending comic movies	_____	_____	_____	_____	_____	_____
Sewing	_____	_____	_____	_____	_____	_____
Horseback riding	_____	_____	_____	_____	_____	_____
Singing informally	_____	_____	_____	_____	_____	_____
Napping	_____	_____	_____	_____	_____	_____
Organizing or participating in class activities	_____	_____	_____	_____	_____	_____
Playing tennis and/or golf (in season)	_____	_____	_____	_____	_____	_____
Camping	_____	_____	_____	_____	_____	_____
Planning liturgies or para-liturgies	_____	_____	_____	_____	_____	_____
Sailing or boating (in season)	_____	_____	_____	_____	_____	_____
Listening to semi-classical music (musicals, operettas, folk operas, etc.)	_____	_____	_____	_____	_____	_____
Roller skating	_____	_____	_____	_____	_____	_____
Watching light entertainment or daytime TV	_____	_____	_____	_____	_____	_____
Reading popular magazines	_____	_____	_____	_____	_____	_____
Writing letters	_____	_____	_____	_____	_____	_____
Creative day-dreaming	_____	_____	_____	_____	_____	_____
Praying	_____	_____	_____	_____	_____	_____
Traveling	_____	_____	_____	_____	_____	_____
Conversing with friends	_____	_____	_____	_____	_____	_____
Studying for pleasure	_____	_____	_____	_____	_____	_____
Participating in theater groups	_____	_____	_____	_____	_____	_____
Drawing, sketching and/or painting	_____	_____	_____	_____	_____	_____
Watching political news and documentaries on TV	_____	_____	_____	_____	_____	_____
Visiting art exhibits	_____	_____	_____	_____	_____	_____
Membership in clubs	_____	_____	_____	_____	_____	_____
Attendance at sports events	_____	_____	_____	_____	_____	_____
Discussing books or ideas with friends	_____	_____	_____	_____	_____	_____

Activity	Do Participate			Wish to Participate		
	Almost Never	Some- times	Often	Never	Some- times	Often
Bowling	_____	_____	_____	_____	_____	_____
Attending educational lectures	_____	_____	_____	_____	_____	_____
Shopping for clothes or furnishings	_____	_____	_____	_____	_____	_____
Participation in politics (national, state, local)	_____	_____	_____	_____	_____	_____
Enjoying silence and solitude	_____	_____	_____	_____	_____	_____
Listening to popular music (Jazz, Rock, Country-Western)	_____	_____	_____	_____	_____	_____
Hiking or walking	_____	_____	_____	_____	_____	_____
Participation in ballet or modern dance	_____	_____	_____	_____	_____	_____
Doing committee work	_____	_____	_____	_____	_____	_____
Participating in educational group discussions	_____	_____	_____	_____	_____	_____
Going on picnics (in season)	_____	_____	_____	_____	_____	_____
Working with wood and metal crafts	_____	_____	_____	_____	_____	_____
Participating in extramural or intramural sports	_____	_____	_____	_____	_____	_____
Social drinking	_____	_____	_____	_____	_____	_____
Attending concerts, recitals	_____	_____	_____	_____	_____	_____
Knitting, macrame', silkscreening (or similar crafts)	_____	_____	_____	_____	_____	_____
Reading major classics (Plato, Dante, Shakespeare, Goethe, etc.)	_____	_____	_____	_____	_____	_____
Grooming (care of hair and clothes, etc.)	_____	_____	_____	_____	_____	_____
Reading news magazines or newspapers for analyses of political events	_____	_____	_____	_____	_____	_____
Sunbathing	_____	_____	_____	_____	_____	_____
Biking	_____	_____	_____	_____	_____	_____
Social dancing	_____	_____	_____	_____	_____	_____
Enjoying nature	_____	_____	_____	_____	_____	_____
Skiing and/or ice skating (in season)	_____	_____	_____	_____	_____	_____
Listening to classical music (opera, symphony)	_____	_____	_____	_____	_____	_____
Window shopping	_____	_____	_____	_____	_____	_____
Dating	_____	_____	_____	_____	_____	_____
Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)	_____	_____	_____	_____	_____	_____



Activity	Do Participate			Wish to Participate		
	Almost Never	Some- times	Often	Never	Some- times	Often
Reading journals or literary magazines	_____	_____	_____	_____	_____	_____
Sharing experiences and feelings with friends	_____	_____	_____	_____	_____	_____
Attending plays	_____	_____	_____	_____	_____	_____
Raising plants or tending fish	_____	_____	_____	_____	_____	_____
Attending liturgical or para-liturgical celebrations	_____	_____	_____	_____	_____	_____
Rearranging and redecorating room	_____	_____	_____	_____	_____	_____
Watching educational television	_____	_____	_____	_____	_____	_____
Volunteer work with community organizations (Girl Scouts, Red Cross, Poverty Program, etc.)	_____	_____	_____	_____	_____	_____
Eating for pleasure	_____	_____	_____	_____	_____	_____
Volunteer work with individuals (aging, handicapped, youth, etc.)	_____	_____	_____	_____	_____	_____
Cooking	_____	_____	_____	_____	_____	_____
Involvement in student government on campus	_____	_____	_____	_____	_____	_____
Playing a musical instrument	_____	_____	_____	_____	_____	_____
Participating in music groups	_____	_____	_____	_____	_____	_____
Reading current popular literature (detective, science fiction, romance)	_____	_____	_____	_____	_____	_____
Swimming	_____	_____	_____	_____	_____	_____
Contributing to literary publications	_____	_____	_____	_____	_____	_____
Creative writing or composing music	_____	_____	_____	_____	_____	_____
Meditating and/or Yoga	_____	_____	_____	_____	_____	_____
Attending serious movies	_____	_____	_____	_____	_____	_____

In what type of leisure activities do you anticipate taking part after you terminate your formal education?

Do the leisure activities in which you participate differ greatly from those in which you wish to take part? Could you elaborate on how this affects your attitude toward leisure.

Does the term "leisure activity" mean anything to you which extends the idea of "what one does for its own sake?" What are some of the other meanings which the term "leisure activity" has for you.

How, as a woman, do you feel about your ability to use leisure?

In what way is leisure significant to you?

Further information concerning this Survey may be  
obtained from:

Sister Joyce Eileen Gallagher  
College of Saint Teresa  
Winona, Minnesota 55987

## APPENDIX E

## LEISURE ACTIVITY SURVEY ITEMS ACCORDING TO AREAS

Creative-Aesthetic

1. Attending concerts, recitals
2. Attending plays
3. Contributing to literary publications
4. Cooking
5. Creative day-dreaming
6. Creative writing or composing music
7. Drawing, sketching and/or painting
8. Grooming (care of hair and clothes, etc.)
9. Inventing and/or using gadgets
10. Knitting, macramé, silkscreening (or similar crafts)
11. Listening to classical music (opera, symphony)
12. Listening to semi-classical music (musicals, operettas, folk operas)
13. Participating in ballet or modern dance
14. Participating in music groups
15. Participating in theater groups
16. Playing a musical instrument
17. Raising plants or tending fish
18. Rearranging and redecorating room
19. Sewing
20. Shopping for clothes or furnishings
21. Visiting art exhibits
22. Working with wood and metal crafts

Entertainment or Relaxation

23. Attendance at sports events
24. Attending comic movies
25. Conversation with friends
26. Dating
27. Eating for pleasure
28. Going on picnics (in season)
29. "Going out with the girls"
30. Listening to popular music (Jazz, Rock, Country-Western)
31. Napping
32. Playing cards and/or table games
33. Reading current popular literature (detective, science fiction, romance)
34. Reading popular magazines
35. Singing informally
36. Social dancing
37. Social drinking
38. Sunbathing
39. Traveling
40. Watching light entertainment or daytime television
41. Window shopping
42. Writing letters

Intellectual

43. Attending educational lectures
44. Attending serious movies
45. Discussing books or ideas with friends
46. Participating in educational group discussions
47. Reading journals or literary magazines
48. Reading major classics (Plato, Dante, Shakespeare, Goethe, etc.)
49. Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)
50. Studying for pleasure
51. Watching educational television

Physical

52. Biking
53. Bowling
54. Camping
55. Hiking or walking
56. Horseback riding
57. Participating in extramural or intramural sports
58. Playing tennis and/or golf (in season)
59. Roller skating
60. Sailing or boating (in season)
61. Skiing and/or ice skating (in season)
62. Swimming

Political-Social

63. Doing committee work
64. Membership in clubs
65. Involvement in student government on campus
66. Organizing or participating in class activities
67. Participation in politics (national, state, local)
68. Reading news magazines or newspapers for analyses of political events
69. Volunteer work with community organizations (Girl Scouts, Red Cross, etc.)
70. Watching political news and documentaries on television

Religious (Reflective and Service)

71. Attending liturgical or para-liturgical celebrations
72. Enjoying nature
73. Enjoying silence and solitude
74. Meditating and/or Yoga
75. Planning liturgies or para-liturgies
76. Praying
77. Sharing experiences and feelings with friends
78. Volunteer work with individuals (aging, handicapped, youth, etc.)



## APPENDIX F

TABLE 14  
CANONICAL VARIATE SETS (WISH)

Number of Canonical Variate Sets	Corresponding Canonical Correlations	Wilk's Lambda	Chi-Square	Degrees of Freedom
1	.67*	.19	230.46*	108
2	.57*	.34	147.59*	85
3	.50*	.51	93.85*	64
4	.41**	.67	54.55**	45
5	.34**	.81	29.38**	28
6	.29	.91	12.64	13

\*Significant at .05 level

\*\*Practical Significance

TABLE 15  
PRINCIPAL LOADINGS OF CANONICAL COEFFICIENTS  
FOR INDEPENDENT VARIABLES (WISH)

	CANVAR 1	CANVAR 2	CANVAR 3	CANVAR 4	CANVAR 5
CPI 1	.37		.61		-.53
CPI 2	.60				-.67
CPI 3	-.30	-.73	.41	-.57	
CPI 4	-.75		.43	1.11	
CPI 5			-.51		.43
CPI 6	-.40			-.85	1.24
CPI 7					.53
CPI 8		.30	.69		-.31
CPI 9			.84	1.18	-.39
CPI 10		-.43		.38	
CPI 11	.44		-.45	-.62	.51
CPI 12					
CPI 13	.60		-.31		

TABLE 15 - Continued

	CANVAR 1	CANVAR 2	CANVAR 3	CANVAR 4	CANVAR 5
CPI 14		.66		-.39	
CPI 15	-.42		-.50	.53	
CPI 16			-.57		
CPI 17				-.38	
CPI 18					

$r \geq .30$ ; significantly different from zero at the .05 level

TABLE 16  
 PRINCIPAL LOADINGS OF CANONICAL COEFFICIENTS  
 FOR DEPENDENT VARIABLES (WISH)

	CANVAR 1	CANVAR 2	CANVAR 3	CANVAR 4	CANVAR 5
LAS 1		-.42	-.70	-.50	
LAS 2	-1.10	-.60	.82	-.46	-.98
LAS 3	.32	-.84	-.56	.49	-.52
LAS 4			-.77		1.53
LAS 5			.81	.85	.50
LAS 6	1.23	.97	.76	-.70	

$r \geq .30$ ; significantly different from zero at the .05 level

TABLE 17

## INTERCORRELATION COEFFICIENTS OF PERSONALITY (CPI) VARIABLES (WISH)

	CPI 1	CPI 2	CPI 3	CPI 4	CPI 5	CPI 6	CPI 7	CPI 8	CPI 9
CPI 1	1.00*								
CPI 2	.57*	1.00*							
CPI 3	.62*	.67*	1.00*						
CPI 4	.51*	.64*	.69*	1.00*					
CPI 5	.61*	.52*	.63*	.60*	1.00*				
CPI 6	.36*	.61*	.44*	.39*	.19*	1.00*			
CPI 7	.46*	.39*	.28*	.11	.17*	.55*	1.00*		
CPI 8	.00	.09	.03	-.11	-.06	.43*	.41*	1.00*	
CPI 9	.02	.24*	.07	-.10	-.20*	.66*	.44*	.46*	1.00*

TABLE 17 - Continued

	CPI 1	CPI 2	CPI 3	CPI 4	CPI 5	CPI 6	CPI 7	CPI 8	CPI 9
CPI 10	.33*	.67*	.42*	.45*	.24*	.79*	.56*	.30*	.55*
CPI 11	.21*	.41*	.31*	.17*	-.07	.63*	.35*	.23*	.78*
CPI 12	.20*	.08	.14	.15*	.21*	.10	.14	.32*	-.17*
CPI 13	.40*	.55*	.47*	.28*	.21*	.71*	.50*	.51*	.63*
CPI 14	.25*	.52*	.31*	.40*	.21*	.63*	.47*	.18*	.47*
CPI 15	.46*	.68*	.52*	.52*	.30*	.77*	.56*	.26*	.47*
CPI 16	.40*	.46*	.33*	.46*	.26*	.51*	.40*	.05	.38*
CPI 17	.09	.41*	.15*	.41*	.17*	.33*	.10	-.14	.11
CPI 18	-.12	-.23*	-.12	-.30*	-.02	.02	.12	.23*	.09

TABLE 17 - Continued

	CPI 10	CPI 11	CPI 12	CPI 13	CPI 14	CPI 15	CPI 16	CPI 17	CPI 18
CPI 10	1.00*								
CPI 11	.51*	1.00*							
CPI 12	.03	-.29*	1.00*						
CPI 13	.59*	.59*	.11	1.00*					
CPI 14	.79*	.40*	-.05	.53*	1.00*				
CPI 15	.80*	.48*	.08	.67*	.71*	1.00*			
CPI 16	.60*	.41*	-.08	.40*	.57*	.64*	1.00*		
CPI 17	.49*	.17*	-.17*	.10	.54*	.40*	.43*	1.00*	
CPI 18	-.07	-.12	.14	.06	.01	-.16*	-.13	-.16*	1.00*

\* $r \geq .15$ ; significantly different from zero at the .05 level



TABLE 18

INTERCORRELATION COEFFICIENTS OF LEISURE ACTIVITY (LAS) VARIABLES (WISH)

	LAS 1	LAS 2	LAS 3	LAS 4	LAS 5	LAS 6
LAS 1	1.00*					
LAS 2	.76*	1.00*				
LAS 3	.73*	.53*	1.00*			
LAS 4	.74*	.81*	.55*	1.00*		
LAS 5	.59*	.64*	.62*	.62*	1.00*	
LAS 6	.80*	.73*	.70*	.73*	.62*	1.00*

\*  $r \geq .15$ ; significantly different from zero at the .05 level

TABLE 19  
INTERCORRELATION COEFFICIENTS OF PERSONALITY (CPI)  
AND LEISURE ACTIVITY (LAS) VARIABLES (WISH)

	CPI 1	CPI 2	CPI 3	CPI 4	CPI 5	CPI 6	CPI 7	CPI 8	CPI 9
LAS 1	.19*	.09	.22*	.00	.14	-.03	.01	-.17*	-.11
LAS 2	.08	-.03	.21*	.01	.03	-.04	-.04	-.02	-.13
LAS 3	.38*	.29*	.34*	.11	.21*	.04	.14	-.14	-.02
LAS 4	.11	.06	.22*	.03	.07	.11	.08	-.01	.00
LAS 5	.31*	.15*	.29*	.07	.16*	.11	.23*	.06	.07
LAS 6	.19*	.13	.16*	-.12	.02	.06	.14	.04	.09

TABLE 19 - Continued

	CPI 10	CPI 11	CPI 12	CPI 13	CPI 14	CPI 15	CPI 16	CPI 17	CPI 18
LAS 1	-.09	.09	-.08	-.01	-.15*	-.10	-.11	-.05	-.08
LAS 2	-.14*	.00	.00	-.10	-.22*	-.16*	-.20*	-.07	-.02
LAS 3	.05	.19*	-.08	.12	-.08	.05	-.05	-.03	-.21*
LAS 4	.00	.14*	-.01	.04	-.08	-.01	-.07	-.05	-.07
LAS 5	.04	.23*	.03	.13	-.08	.00	-.08	-.10	.02
LAS 6	-.02	.21*	-.12	.14	-.06	-.05	.40*	-.05	-.08

\*  $r \geq .15$ ; significantly different from zero at the .05 level

## APPENDIX G

TABLE 20

## DESCRIPTIVE DATA LAS (DO)

Item	N	<sup>1</sup> Frequency	%	<sup>2</sup> Frequency	%	<sup>3</sup> Frequency	%	Mean	Standard Deviation
1	150	105	70.0	38	25.3	7	4.7	1.33	.59
2	150	31	20.7	81	54.0	38	25.3	2.05	.68
3	150	5	3.3	59	39.3	86	57.3	2.54	.56
4	150	31	20.7	98	65.3	21	14.0	1.93	.59
5	150	59	39.3	47	31.3	44	29.3	1.90	.83
6	150	100	66.7	36	24.0	14	9.3	1.43	.66
7	150	42	28.0	65	43.3	43	28.7	2.01	.76
8	150	65	43.3	75	48.7	12	8.0	1.65	.63
9	150	35	23.3	90	60.0	25	16.7	1.93	.63
10	150	68	45.3	55	36.7	27	18.0	1.73	.75
11	150	79	52.7	55	36.7	16	10.7	1.58	.68
12	150	124	82.7	21	14.0	5	3.3	1.21	.48
13	150	74	49.3	51	34.0	25	16.7	1.67	.75

TABLE 20 - Continued

Item	N	1 Frequency	%	2 Frequency	%	3 Frequency	%	Mean	Standard Deviation
14	150	58	38.7	68	45.3	24	16.0	1.77	.71
15	150	114	76.0	34	22.7	2	1.3	1.25	.47
16	150	70	46.7	69	46.0	11	7.3	1.61	.62
17	150	35	23.3	87	58.0	28	18.7	1.95	.65
18	150	15	10.0	71	47.3	64	42.7	2.33	.65
19	150	19	12.7	99	66.0	32	21.3	2.09	.58
20	150	24	16.0	70	46.7	56	37.3	2.21	.70
21	150	43	28.7	80	53.3	27	18.0	1.89	.68
22	150	2	1.3	19	12.7	129	86.0	2.85	.40
23	150	38	25.3	87	58.0	25	16.7	1.91	.64
24	150	125	83.3	20	13.3	5	3.3	1.20	.48
25	150	99	66.0	39	26.0	12	8.0	1.42	.64
26	150	67	44.7	73	48.7	10	6.7	1.62	.61
27	150	70	46.7	73	48.7	7	4.7	1.58	.58

TABLE 20 - Continued

Item	N	<sup>1</sup> Frequency	%	<sup>2</sup> Frequency	%	<sup>3</sup> Frequency	%	Mean	Standard Deviation
28	150	48	32.0	85	56.7	17	11.3	1.79	.63
29	150	40	26.7	75	50.0	35	23.3	1.97	.71
30	150	6	4.0	70	46.7	74	49.3	2.45	.57
31	150	82	54.7	66	44.0	2	1.3	1.47	.53
32	150	62	41.3	72	48.0	16	10.7	1.69	.66
33	150	19	12.7	95	63.3	36	24.0	2.11	.60
34	150	128	85.3	21	14.0	1	.7	1.15	.38
35	150	13	8.7	94	62.7	43	28.7	2.20	.58
36	150	7	4.7	46	30.7	97	64.7	2.60	.58
37	150	11	7.3	82	54.7	57	38.0	2.31	.60
38	150	124	82.7	18	12.0	8	5.3	1.21	.55
39	150	68	45.3	68	45.3	14	9.3	1.64	.65
40	150	70	46.7	63	42.0	17	11.3	1.65	.68
41	150	27	18.0	86	57.3	37	24.7	2.07	.65

TABLE 20 - Continued

Item	N	<sup>1</sup> Frequency	%	<sup>2</sup> Frequency	%	<sup>3</sup> Frequency	%	Mean	Standard Deviation
42	150	119	79.3	26	17.3	5	3.3	1.24	.50
43	150	66	44.0	60	40.0	24	16.0	1.72	.73
44	150	31	20.7	84	56.0	35	23.3	2.03	.67
45	150	45	30.0	83	55.3	22	14.7	1.85	.65
46	150	67	44.7	56	37.3	27	18.0	1.73	.75
47	150	92	61.3	51	34.0	7	4.7	1.43	.58
48	150	7	4.7	40	26.7	103	68.7	2.64	.57
49	150	63	42.0	60	40.0	27	18.0	1.76	.74
50	150	45	30.0	61	40.7	44	29.3	1.99	.77
51	150	18	12.0	73	48.7	59	39.3	2.27	.67
52	150	28	18.7	74	49.3	48	32.0	2.13	.70
53	150	16	10.7	60	40.0	74	49.3	2.39	.67
54	150	63	42.0	61	40.7	26	17.3	1.75	.73
55	150	83	55.3	52	34.7	15	10.0	1.55	.67



TABLE 20 - Continued

Item	N	<sup>1</sup> Frequency	%	<sup>2</sup> Frequency	%	<sup>3</sup> Frequency	%	Mean	Standard Deviation
56	150	27	18.0	78	52.0	45	30.0	2.12	.69
57	150	38	25.3	55	36.7	57	38.0	2.13	.79
58	150	76	50.7	58	38.7	16	10.7	1.60	.68
59	150	53	35.3	81	54.0	16	10.7	1.75	.63
60	150	2	1.3	31	20.7	117	78.0	2.77	.46
61	150	34	22.7	100	66.7	16	10.7	1.88	.57
62	150	56	37.3	55	36.7	39	26.0	1.89	.79
63	150	42	28.0	56	37.3	52	34.7	2.07	.79
64	150	26	17.3	92	61.3	32	21.3	2.04	.62
65	150	90	60.0	55	36.7	5	3.3	1.43	.56
66	150	82	54.7	55	36.7	13	8.7	1.54	.65
67	150	17	11.3	79	52.7	54	36.0	2.25	.64
68	150	73	48.7	59	39.3	18	12.0	1.63	.69
69	150	48	32.0	67	44.7	35	23.3	1.91	.74

TABLE 20 - Continued

Item	N	1 Frequency	%	2 Frequency	%	3 Frequency	%	Mean	Standard Deviation
70	150	118	78.7	24	16.0	8	5.3	1.27	.55
71	150	83	55.3	47	31.3	20	13.3	1.58	.72
72	150	111	74.0	27	18.0	12	8.0	1.34	.62
73	150	48	32.0	70	46.7	32	21.3	1.89	.73
74	150	43	28.7	67	44.7	40	26.7	1.98	.75
75	150	140	93.3	5	3.3	5	3.3	1.10	.41
76	150	112	74.7	26	17.3	12	8.0	1.33	.63
77	150	117	78.0	23	15.3	10	6.7	1.29	.58
78	150	25	16.7	105	70.0	20	13.3	1.97	.55

TABLE 21

## FACTOR ANALYSIS OF LAS RESPONSES (DO)

Five Highest Positive and Negative Responses are Presented.

Otherwise, Only Loadings  $\geq .20$  are Listed.

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 1	8.81	8.41		-.55 Hiking or walking -.51 Biking -.48 Watching political news and documen- taries on TV -.47 Organizing or parti- cipating in class activities -.47 Visiting art exhibits
FAC 2	5.11	4.72	.49 Sunbathing .41 Window shopping .38 Dating	-.47 Participating in theater groups -.44 Reading major clas- sics (Plato, Dante, Shakespeare, Goethe, etc.)

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.38 Grooming (care of hair and clothes, etc.)	-.44 Listening to classical music (opera, symphony)
			.36 Rearranging and re- decorating room	-.41 Participating in edu- cational group discussions
				-.40 Listening to semi- classical music (musicals, operettas, folk operas, etc.)
FAC 3	3.40	2.97	.52 Playing cards and/or table games	-.46 Camping
			.38 Watching light entertainment on daytime TV	-.41 Participating in extramural or intra- mural sports
			.33 Attending serious movies	-.40 Horseback riding
			.32 Rearranging and re- decorating room	-.39 Skiing and/or ice skating (in season)

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.29 Conversing with friends	-.34 Biking
FAC 4	3.23	2.83	.45 Doing committee work	-.43 Listening to classical music (opera, symphony)
			.44 Organizing or participating in class activities	-.36 Meditating and/or Yoga
			.37 Involvement in student government on campus	-.36 Shopping for clothes or furnishings
			.34 Attendance at sports events	-.32 Listening to semi-classical music (musicals, operettas, folk operas, etc.)
			.32 "Going out with the girls"	-.30 Praying
FAC 5	3.02	2.62	.52 Attending liturgies or para-liturgical celebrations	-.32 Social drinking
			.43 Planning liturgies or para-liturgies	-.29 Creative day-dreaming
				-.29 Reading popular magazines

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.37 Praying	-.29 Reading journals or literary magazines
			.33 Involvement in student government on campus	-.29 Enjoying silence and solitude
			.32 Participating in music groups	
FAC 6	2.39	2.00	.39 Watching political news and documen- taries on TV	-.39 Discussing books or ideas with friends
			.38 Knitting, macramé, silk-screening (or similar crafts)	-.39 Eating for pleasure
			.32 Reading news maga- zines or newspapers for analyses of political events	-.34 Conversing with friends
				-.31 Sharing experiences and feelings with friends
			.28 Participation in politics (national, state, local)	-.26 Attending plays

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.22 Volunteer work with community organiza- tions (Girl Scouts, Red Cross, Poverty Program, etc.)	
FAC 7	2.30	1.90	.30 Reading current pop- ular literature (detective, science fiction, romance)	-.43 Attending educational lectures
			.27 Knitting, macramé, silk-screening (or similar crafts)	-.34 Studying for pleasure
			.27 Participating in music groups	-.31 Horseback riding
			.21 Creative writing or composing music	-.27 Watching educational television
			.21 Going on picnics (in season)	-.26 Reading news magazines or newspapers for analyses of political events

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 8	2.16	1.72	.47 Drawing, sketching and/or painting	-.34 Participating in extramural or intra- mural sports
			.36 Inventing and/or using gadgets	-.29 Reading popular magazines
			.29 Singing informally	
			.28 Cooking	-.28 Attending concerts, recitals
			.28 Creative day-dreaming	-.28 Attending comic movies
				-.24 Attending plays
FAC 9	2.01	1.60	.32 Hiking or walking	-.30 Participation in ballet or modern dance
			.26 Attending plays	-.30 Creative writing or composing music
			.23 Planning liturgies or para-liturgies	-.30 Participation in music groups
			.22 Enjoying nature	
				-.27 Swimming



TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.22 Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)	-.25 Singing informally
FAC 10	1.91	1.51	.32 Social dancing	-.33 Playing cards and/or table games
			.25 Visiting art exhibits	-.31 Working with wood and metal crafts
			.24 Attending plays	-.30 Attending comic movies
			.24 Enjoying nature	-.27 Volunteer work with community organiza- tions (Girl Scouts, Red Cross, Poverty Program, etc.)
			.22 Social drinking	-.23 Volunteer work with individuals (aging, handicapped, youth, etc.)

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 11	1.88	1.48	.41 Participating in theater groups	-.30 Reading news magazines or newspapers for analyses of political events
			.34 Volunteer work with community organiza- tions (Girl Scouts, Red Cross, Poverty Program, etc.)	-.27 Contributing to literary publications
			.32 Knitting, macramé, silk-screening (or similar crafts)	-.27 Napping
			.24 Attending comic movies	-.25 Planning liturgies or para-liturgies
			.23 Dating	-.22 Creative writing or composing music
FAC 12	1.73	1.32	.28 Meditating and/or Yoga	-.32 Participation in politics (national, state, local)
			.27 Social dancing	
			.26 Traveling	-.30 Inventing and/or using gadgets
			.26 Working with wood and metal crafts	-.27 Raising plants or tending fish

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.22 Hiking or walking	-.25 Eating for pleasure
				-.20 Praying
FAC 13	1.68	1.25	.22 Organizing or parti- cipating in class activities	-.36 Writing letters
				-.29 Sewing
			.20 Enjoying nature	-.26 Contributing to literary publications
				-.25 Attending plays
				-.24 Rearranging and re- decorating room
FAC 14	1.57	1.16	.29 Reading news maga- zines or newspapers for analyses of political events	-.27 Watching light enter- tainment or daytime TV
				-.27 Writing letters
			.29 Participating in politics (national, state, local)	-.25 Enjoying nature

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.26 Skiing and/or ice- skating (in season)	
			.21 Going on picnics (in season)	
			.20 Social dancing	
FAC 15	1.53	1.13	.36 Cooking	-.26 Listening to popular music (Jazz, Rock, Country-Western)
			.25 Watching political news and documentaries on TV	-.24 Writing letters
			.21 Eating for pleasure	-.21 Participation in ballet or modern dance
				-.21 Planning liturgies or para-liturgies
				-.21 Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 16	1.50	1.11	.29 Participation in politics (national, state, local)	-.27 Praying
			.28 Planning liturgies or para-liturgies	-.22 Volunteer work with individuals (aging, handicapped, youth, etc.)
			.26 Sailing or boating (in season)	
			.25 Participating in theater groups	
FAC 17	1.42	1.01	.23 Watching political news and documentaries on TV	-.27 Roller skating
			.22 Organizing or parti- cipating in class activities	-.22 Volunteer work with individuals (aging, handicapped, youth, etc.)
			.21 Knitting, macramé, silk-screening (or similar crafts)	-.21 Bowling
			.20 Enjoying nature	-.20 Contributing to literary publications
				-.20 Watching educational television

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 18	1.40	.99	.30 Visiting art exhibits	-.26 Eating for pleasure
			.27 Inventing and/or using gadgets	-.22 Reading major classics (Plato, Dante, Shakespeare, Goethe, etc.)
			.24 Studying for pleasure	
FAC 19	1.35	.94	.23 Participating in music groups	-.28 Shopping for clothes or furnishings
			.22 Social dancing	-.23 Sailing or boating (in season)
				-.21 Involvement in student government on campus
FAC 20	1.25	.85	.25 Going on picnics (in season)	-.35 Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)
				-.22 Cooking
				-.21 Bowling

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 21	1.19	.80	.25 Membership in clubs .24 Shopping for clothes and furnishings .23 Rearranging and re- decorating room	-.22 Volunteer work with individuals (aging, handicapped, youth, etc.) -.22 Eating for pleasure -.20 Bowling
FAC 22	1.15	.76		-.30 Participating in educational group discussions -.24 Reading journals or literary magazines -.21 Grooming (care of hair and clothes, etc.)
FAC 23	1.14	.73	.20 Inventing and/or using gadgets	-.30 Attending liturgical or para-liturgical celebrations

TABLE 21 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
				-.22 Rearranging and re- decorating room
FAC 24	1.10	.66		-.23 "Going out with the girls"
FAC 25	1.02	.63	.23 Participation in ballet or modern dance	
FAC 26	1.01	.60	.22 Listening to popular music (Jazz, Rock, Country-Western)	-.22 Sharing experiences and feelings with friends  -.21 Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)



TABLE 22  
DESCRIPTIVE DATA LAS (WISH)

Item	N	Frequency <sup>0</sup>	%	Frequency <sup>1</sup>	%	Frequency <sup>2</sup>	%	Frequency <sup>3</sup>	%	Mean	Standard Deviation
1	150	8	5.3	56	37.3	73	48.7	13	8.7	1.61	.72
2	150	12	8.0	13	8.7	82	54.7	43	28.7	2.04	.83
3	150	10	6.7	2	1.3	60	40.0	78	52.0	2.37	.82
4	150	10	6.7	16	10.7	94	62.7	30	20.0	1.96	.76
5	150	10	6.7	12	8.0	56	37.3	72	48.0	2.27	.87
6	150	5	3.3	23	15.3	61	40.7	61	40.7	2.19	.81
7	150	9	6.0	18	12.0	67	44.7	56	37.3	2.13	.85
8	150	7	4.7	42	28.0	83	55.3	18	12.0	1.75	.73
9	150	8	5.3	10	6.7	93	62.0	39	26.0	2.09	.73
10	150	4	2.7	19	12.7	58	38.7	69	46.0	2.28	.79
11	150	4	2.7	21	14.0	63	42.0	62	41.3	2.22	.79
12	150	6	4.0	70	46.7	60	40.0	14	9.3	1.55	.72
13	150	6	4.0	7	4.7	59	39.3	78	52.0	2.39	.76

TABLE 22 - Continued

Item	N	Frequency <sup>0</sup>	%	Frequency <sup>1</sup>	%	Frequency <sup>2</sup>	%	Frequency <sup>3</sup>	%	Mean	Standard Deviation
14	150	8	5.3	25	16.7	86	57.3	31	20.7	1.93	.77
15	150	9	6.0	43	28.7	79	52.7	19	12.7	1.72	.76
16	150	8	5.3	38	25.3	86	57.3	18	12.0	1.76	.73
17	150	9	6.0	14	9.3	75	50.0	52	34.7	2.13	.82
18	150	9	6.0	8	5.3	52	34.7	81	54.0	2.37	.84
19	150	10	6.7	11	7.3	97	64.7	32	21.3	2.01	.75
20	150	11	7.3	14	9.3	53	35.3	72	48.0	2.24	.90
21	150	7	4.7	2	1.3	37	24.7	104	69.3	2.59	.74
22	150	11	7.3	0	0	13	8.7	126	84.0	2.69	.81
23	150	9	6.0	13	8.7	76	50.7	52	34.7	2.14	.81
24	150	4	2.7	65	43.3	67	44.7	14	9.3	1.61	.69
25	150	5	3.3	38	25.3	64	42.7	43	28.7	1.97	.82
26	150	8	5.3	28	18.7	84	56.0	30	20.0	1.91	.77
27	150	6	4.0	22	14.7	86	57.3	36	24.0	2.01	.74

TABLE 22 - Continued

Item	N	Frequency	<sup>0</sup> %	Frequency	<sup>1</sup> %	Frequency	<sup>2</sup> %	Frequency	<sup>3</sup> %	Mean	Standard Deviation
28	150	9	6.0	27	18.0	90	60.0	24	16.0	1.86	.75
29	150	10	6.7	19	12.7	58	38.7	63	42.0	2.16	.89
30	150	11	7.3	1	0.7	60	40.0	78	52.0	2.37	.83
31	150	7	4.7	28	18.7	81	54.0	34	22.7	1.95	.78
32	150	7	4.7	21	14.0	90	60.0	32	21.3	1.98	.74
33	150	8	5.3	7	4.7	80	53.3	55	36.7	2.21	.77
34	150	5	3.3	72	48.0	63	42.0	10	6.7	1.52	.67
35	150	8	5.3	6	4.0	75	50.0	61	40.7	2.26	.77
36	150	11	7.3	3	2.0	40	26.7	96	64.0	2.47	.86
37	150	9	6.0	2	1.3	37	24.7	102	68.0	2.55	.80
38	150	5	3.3	66	44.0	52	34.7	27	18.0	1.67	.81
39	150	7	4.7	36	24.0	90	60.0	17	11.3	1.78	.70
40	150	7	4.7	49	32.7	72	48.0	22	14.7	1.73	.77
41	150	8	5.3	5	3.3	38	25.3	99	66.0	2.52	.80

TABLE 22 - Continued

Item	N	Frequency <sup>0</sup>	%	Frequency <sup>1</sup>	%	Frequency <sup>2</sup>	%	Frequency <sup>3</sup>	%	Mean	Standard Deviation
42	150	4	2.7	51	34.0	63	42.0	32	21.3	1.82	.80
43	150	7	4.7	18	12.0	70	46.7	55	36.7	2.15	.81
44	150	9	6.0	24	16.0	84	56.0	33	22.0	1.94	.79
45	150	5	3.3	11	7.3	80	53.3	54	36.0	2.22	.72
46	150	7	4.7	14	9.3	63	42.0	66	44.0	2.25	.81
47	150	7	4.7	49	32.7	72	48.0	22	14.7	1.73	.77
48	150	11	7.3	6	4.0	34	22.7	99	66.0	2.47	.88
49	150	7	4.7	25	16.7	64	42.7	54	36.0	2.10	.84
50	150	9	6.0	24	16.0	54	36.0	63	42.0	2.14	.90
51	150	7	4.2	2	1.3	38	25.3	103	68.7	2.58	.74
52	150	9	6.0	12	8.0	52	34.7	77	51.3	2.31	.86
53	150	7	4.2	2	1.3	33	22.0	108	72.0	2.61	.74
54	150	4	2.7	14	9.3	61	40.7	71	47.3	2.33	.76
55	150	8	5.3	45	30.0	76	50.7	21	14.0	1.73	.77

TABLE 22 - Continued

Item	N	Frequency <sup>0</sup> %		Frequency <sup>1</sup> %		Frequency <sup>2</sup> %		Frequency <sup>3</sup> %		Mean	Standard Deviation
56	150	10	6.7	17	11.3	80	53.3	43	28.7	2.04	.82
57	150	7	4.7	13	8.7	48	32.0	82	54.7	2.37	.83
58	150	6	4.0	32	21.3	75	50.0	37	24.7	1.95	.79
59	150	8	5.3	18	12.0	92	61.3	32	21.3	1.99	.74
60	150	10	6.7	0	0.0	21	14.0	119	79.3	2.66	.79
61	150	5	3.3	7	4.7	73	48.7	65	43.3	2.32	.72
62	150	6	4.0	22	14.7	66	44.0	56	37.3	2.15	.81
63	150	12	8.0	25	16.7	52	34.7	61	40.7	2.08	.95
64	150	10	6.7	15	10.0	86	57.3	39	26.0	2.03	.79
65	150	9	6.0	43	28.7	79	52.7	19	12.7	1.72	.76
66	150	4	2.7	19	12.7	85	56.7	42	28.0	2.10	.71
67	150	8	5.3	28	18.7	79	52.7	35	23.3	1.94	.80
68	150	4	2.7	15	10.0	73	48.7	58	38.7	2.23	.74
69	150	8	5.3	16	10.7	54	36.0	72	48.0	2.27	.86

TABLE 22 - Continued

Item	N	Frequency <sup>0</sup>	%	Frequency <sup>1</sup>	%	Frequency <sup>2</sup>	%	Frequency <sup>3</sup>	%	Mean	Standard Deviation
70	150	6	4.0	68	45.3	63	42.0	13	8.7	1.55	.71
71	150	6	4.0	16	10.7	55	36.7	73	48.7	2.30	.82
72	150	5	3.3	49	32.7	58	38.7	38	25.3	1.86	.84
73	150	8	5.3	17	11.3	71	47.3	54	36.0	2.14	.82
74	150	8	5.3	8	5.3	51	34.0	83	55.3	2.39	.82
75	150	8	5.3	85	56.7	43	28.7	14	9.3	1.42	.74
76	150	5	3.3	64	42.7	56	37.3	25	16.7	1.67	.79
77	150	7	4.7	64	42.7	54	36.0	25	16.7	1.65	.81
78	150	8	5.3	7	4.7	96	64.0	39	26.0	2.11	.72

- 196 Rising or walking

TABLE 23

## FACTOR ANALYSIS OF LAS RESPONSES (WISH)

Five Highest Positive and Negative Responses are Presented.

Otherwise, Only Loadings  $\geq .20$  are Listed.

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 1	26.03	25.69		-.85 Conversing with friends -.83 Sharing experiences and feelings with friends -.77 Listening to popular music (Jazz, Rock, Country-Western) -.76 Grooming (care of hair and clothes, etc.) -.76 Hiking or walking
FAC 2	4.41	4.06	.39 Sunbathing	-.53 Contributing to literary publications

TABLE 23 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.37 Shopping for clothes or furnishings	-.51 Creative writing or composing music
			.36 Window shopping	-.44 Participating in theater groups
			.32 Playing cards and/or table games	-.42 Participating in educational group discussions
			.29 Grooming (care of hair and clothes, etc.)	-.39 Participating in music groups
FAC 3	2.70	2.32	.40 Participating in music groups	-.31 Discussing books or ideas with friends
			.38 Volunteer work with individuals (aging, handicapped, youth, etc.)	-.29 Enjoying silence and solitude
			.38 Volunteer work with community organiza- tions (Girl Scouts, Red Cross, Poverty Program, etc.)	-.26 "Going out with the girls"
				-.24 Listening to classical music (opera, symphony)



TABLE 23 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.36 Camping	-.23 Studying for pleasure
			.31 Participation in ballet or modern dance	
FAC 4	2.58	2.20	.40 Involvement with student government on campus	-.33 Watching light enter- tainment or daytime TV
			.36 Membership in clubs	-.32 Attending comic movies
			.35 Doing committee work	-.31 Listening to classical music (opera, symphony)
			.30 Skiing and/or ice- skating (in season)	-.31 Attending plays
			.29 Participation in politics (national, state, local)	-.30 Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)
FAC 5	2.43	2.05	.42 Participating in music groups	-.32 Participating in extramural or intra- mural sports

TABLE 23 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 6	2.18	1.81	.38 Planning liturgies or para-liturgies	-.28 Skiing and/or ice- skating (in season)
			.33 Attending liturgical or para-liturgical celebrations	-.28 Visiting art exhibits
			.29 Singing informally	-.27 Attending concerts, recitals
			.22 Praying	-.25 Horseback riding
			.32 Creative writing or composing music	-.31 Volunteer work with community organizations (Girl Scouts, Red Cross, Poverty Program, etc.)
			.31 Playing tennis and/or golf (in season)	-.30 Attending liturgical or para-liturgical celebrations
			.28 Drawing, sketching and/or painting	-.30 Reading major classics (Plato, Dante, Shake- speare, Goethe, etc.)
			.26 Working with wood and metal crafts	-.27 Reading journals or literary magazines
			.25 Meditating and/or Yoga	-.25 Listening to classical music (opera, symphony)

TABLE 23 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 7	2.12	1.75	.30 Visiting art exhibits	-.31 Doing committee work
			.29 Sewing	-.29 Social dancing
			.25 Planning liturgies or para-liturgies	-.28 Participating in educational group discussions
			.24 Attending liturgical or para-liturgical celebrations	-.24 Social drinking
			.23 Raising plants or tending fish	-.23 Involvement in student government on campus
FAC 8	1.78	1.43	.30 Meditating and/or Yoga	-.29 Organizing or parti- cipating in class activities
			.26 Knitting, macramé, silk-screening (or similar crafts)	-.23 Watching light enter- tainment or daytime TV
			.24 Drawing, sketching, and/or painting	-.23 Writing letters
			.22 Enjoying nature	-.21 Volunteer work with individuals (aging, handicapped, youth, etc.)

TABLE 23 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.22 Participating in educational group discussions	-.21 Watching political news and documentaries on TV
FAC 9	1.65	1.26	.25 Attendance at sports events	-.40 Working with wood and metal crafts
			.23 Traveling	-.24 Biking
				-.23 Knitting, macramé, silk-screening (or similar crafts)
				-.23 Napping
				-.22 Watching political news and documentaries on TV
FAC 10	1.47	1.10	.29 Enjoying nature	-.33 Sailing or boating (in season)
			.25 Attending plays	-.32 Participating in theater groups

TABLE 23 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
			.22 Playing a musical instrument	-.21 Participation in politics (national, state, local)
			.21 Reading minor classics (Dickens, Browning, Austin, Keats, Hesse, etc.)	
FAC 11	1.41	1.03	.25 Volunteer work with individuals (aging, handicapped, youth, etc.)	-.28 Participating in extramural or intra- mural sports
			.20 Dating	-.23 Enjoying nature
			.20 Cooking	
			.20 Involvement in student government on campus	
FAC 12	1.32	.94	.25 Playing tennis and/or golf (in season)	-.23 Knitting, macramé, silk-screening (or similar crafts)
			.21 Camping	

TABLE 23 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 13	1.30	.91	.21 Sunbathing	-.34 Roller skating -.31 Bowling -.31 Eating for pleasure
FAC 14	1.17	.80	.24 Watching educational television	
FAC 15	1.15	.75	.23 Creative writing or composing music	-.30 Camping -.22 Participation in ballet or modern dance -.22 Planning liturgies or para-liturgies

TABLE 23 - Continued

Principal Factor	Eigenvalue		Positive Loadings	Negative Loadings
	(Complete Correlation Matrix)	(Factor Matrix)		
FAC 16	1.11	.73	.24 Attending plays	-.25 Participation in ballet or modern dance
FAC 17	1.05	.70	.25 Meditating and/or Yoga .21 Watching light enter- tainment or daytime TV	-.21 Biking

TABLE 24

## DESCRIPTIVE DATA CPI

Scale*	N	Maximum Possible Score	Maximum Score Obtained	Range	Minimum Score Obtained	Mean	Standard Deviation
CPI 1 (Do)	150	46	40		12	27.88	6.23
CPI 2 (Cs)	150	32	28		7	20.00	3.98
CPI 3 (Sy)	150	36	35		9	25.77	4.67
CPI 4 (Sp)	150	56	51		20	37.70	6.23
CPI 5 (Sa)	150	34	30		9	21.98	3.81
CPI 6 (Wb)	150	44	44		18	36.41	5.01
CPI 7 (Re)	150	42	38		20	30.22	3.88
CPI 8 (So)	150	54	49		26	38.61	4.73
CPI 9 (Sc)	150	50	48		11	30.07	7.23
CPI 10 (To)	150	32	32		5	23.97	4.91
CPI 11 (Gi)	150	40	33		5	17.86	6.24
CPI 12 (Cm)	150	28	28		18	25.38	2.20



TABLE 24 - Continued

Scale*	N	Maximum Possible Score	Range		Mean	Standard Deviation
			Maximum Score Obtained	Minimum Score Obtained		
CPI 13 (Ac)	150	38	36	16	28.13	4.31
CPI 14 (Ai)	150	32	31	7	21.45	4.42
CPI 15 (Ie)	150	52	49	24	39.81	5.86
CPI 16 (Py)	150	22	18	2	11.93	2.76
CPI 17 (Fx)	150	22	21	2	11.35	4.01
CPI 18 (Fe)	150	38	33	12	22.91	3.32

\*Definitions and Descriptions of Scales are presented in Table I.

APPROVAL SHEET

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Date May 5, 1975

John Eddy  
Director's Signature